Royal College of Obstetricians & Gynaecologists

32nd Annual Conference
AICC RCOG

1st - 5th Nov, 2018 Delhi

Hosted by AICC RCOG North Zone

OBSTETRICS & GYNAECOLOGY
EVIDENCE, GOOD PRACTICE AND CONTROVERSIES

VENUE:
Hotel Sheraton
District Centre, Saket,
New Delhi, 110017

Souvenir & Abstract Book

www.aiccrcognzindia.com

INVITATION

Dear Friends,

On behalf of the All India Coordination Committee of **Royal College of Obstetricians & Gynaecologists (AICC RCOG)** we are delighted to announce and invite you to the 32nd AICC RCOG Annual Conference. It is the proud privilege of Fellows and Members of Northern Zone of AICC RCOG to organize this prestigious event at Hotel Sheraton New Delhi from 1st to 5th November 2018.

Keeping up with the theme **"Obstetrics & Gynaecology: Evidence,Good Practice and Controversies"**, this conference is dedicated to educate and share the latest innovations and updates in Obstetrics and Gynaecology as per RCOG standards and focus on the meaningful application of this knowledge to the extremely divergent needs and challenges of women's healthcare in India.

The meticulously planned scientific program consists of Nine pre conference (1st & 2nd November) and One post congress (5th November) workshops, 2 Orations, Keynote addresses, Guest Lectures, Stump the Experts and Panel discussions based on case-studies. The abstracts are invited for oral presentation as Oral under twelve separate categories, with a prize for best presentation. Please check our website www.aiccrcognzindia.com for regular updates on this conference.

Warm regards,

Dr Nirmala Agarwal
Organizing Chairperson
& Zonal Head North

Dr Anita Kaul
Organizing Co-Chairperson

Dr Arbinder Dang
Organizing Secretary

Dr Suchitra Pandit
Chairman AICC RCOG

Dr Bhaskar Pal
Zonal Head East

Dr Rekha Kurien
Zonal Head South

Dr Ameet Patki
Zonal Head West

INTERNATIONAL FACULTY

Professor Mary Ann Lumsden OBE, Vice President RCOG UK Strategic Development, RCOG UK, Chair, National Guideline Alliance Consortium RCOG.

Dr Alison Wright, Vice President for UK and Global Membership, RCOG, UK

Professor Andrew Shennan, OBE Professor of Obstetrics at King's College London. Clinical lead of the Maternal and Fetal Research Unit, UK.

Professor Margaret Cruickshank, Co-chair the Education and Training Committee of the International Federation of Colposcopy and Cervical Pathology (IFCPC), UK.

Dr Edward Morris, Vice President, Clinical Quality, RCOG, UK

Dr Edmund Neale, Chair Part 3 MRCOG Clinical Assessment Subcomittee, RCOG, UK

Dr Ranee Thakar, South Asia Fellow Representative, RCOG, UK

Dr Patrick Chien, Deputy Editor-in-Chief | BJOG: An International Journal of Obstetrics and Gynaecology, UK.

Dr Margaret J Evans, Consultant paediatric and perinatal pathologist,Royal Infirmary of Edinburgh, UK.

Dr Alka Prakash, Consultant Reproductive Medicine and Surgery, Cambridge University Hospitals NHS Trust, UK

Dr Theresa Freeman Wang, Consultant Gynaecologist President Elect British Colposcopy Society, UK.

Dr Manjiri Khare, Consultant Feto Maternal Specialist, UK.

Dr Partha Basu, Group Head Screening Group, Gynaecological, Oncology, Pevention and Early Detection, France.

Dr Veena Kaul, Consultant OBGYN and Colposcopist, UK.













Edgar Guest
(Born: 20 August 1881, Died: 5 August 1959)

It Couldn't Be Done

Somebody said that it couldn't be done
But he with a chuckle replied
That "maybe it couldn't," but he would be one
Who wouldn't say so till he'd tried.
So he buckled right in with the trace of a grin
On his face. If he worried he hid it.
He started to sing as he tackled the thing
That couldn't be done, and he did it!

Somebody scoffed: "Oh, you'll never do that;
At least no one ever has done it;"
But he took off his coat and he took off his hat
And the first thing we knew he'd begun it.
With a lift of his chin and a bit of a grin,
Without any doubting or quiddit,
He started to sing as he tackled the thing
That couldn't be done, and he did it.

There are thousands to tell you it cannot be done,
There are thousands to prophesy failure,
There are thousands to point out to you one by one,
The dangers that wait to assail you.
But just buckle in with a bit of a grin,
Just take off your coat and go to it;
Just start in to sing as you tackle the thing
That "cannot be done," and you'll do it.

Contents

OVERVIEW AT A GLANCE

Pre Conference Workshop

Thursday, 01 November, 2018 Venue: Indraprastha Apollo Hospital, Sarita Vihar, New Delhi

09:00 am - 01:00 pm - Workshop 1: BJOG Author Workshop

02:00 pm - 06:30 pm - Workshop 2: Urogynaecology Video Workshop

09:00 am - 05:00 pm - Workshop 3: RCOG / FOGSI-USG Training the Trainers

Friday, 02 November, 2018 Venue: Hotel Sheraton, Saket, Delhi

08:00 am - 04:00 pm - Workshop 4: Reproductive Medicine : Clinical updates

08:00 am - 01:00 pm - Workshop 5: Menopausal Wellness Workshop

08:00 am - 04:00 pm - Workshop 6: Obstetric Emergencies Skills Based Workshop

08:00 am - 04:00 pm - Workshop 7: Feto Maternal Medicine Workshop

01:30 pm - 05:00 pm - Workshop 8: Preventing Still Births Workshop

Friday, 02 November, 2018 Venue: B-235, C R Park, Academic Center & Library, New Delhi-110019

08:00 am - 04:00 pm - Workshop 9: Perineal repair

Friday, 02 November, 2018 Venue: Hotel Sheraton, Saket, Delhi

04:00 pm - 06:00 pm AICC RCOG Council Meeting

06:00 pm - 07:00 pm Royal College Committee and AICC RCOG Committee Meeting

07:00 pm Onwards Faculty Dinner at Dynasty Hall

Scientific Session

Saturday, 03 November, 2018 Day 1 - Venue: Hotel Sheraton, Saket, Delhi

07:30 am - 08:00 am Registration & Welcome Address

08:00 am - 08:45 am Breakfast sessions / Meet the Experts

09:00 am - 05:00 pm Scientific Sessions

11:00 am - 12:00 pm Inauguration Ceremony

04:30 pm - 05:00 pm AICC General Body Meeting

08:00 pm Onwards Banquet Pool Side Theme : Delhi Through the Ages

Sunday, 04 November, 2018 Day 2 - Venue: Hotel Sheraton, Saket, Delhi

08:00 am - 08:45 am Breakfast Sessions / Meet the Experts

09:00 am - 05:00 pm Scientific Sessions

09:00 am - 10:00 am MRCOG Curriculum, Exams and Latest Developments / RCOG Audit and Safety (Hall C)

04:30 pm - 05:30 pm Valedictory

Post Conference Workshop

Monday, 05 November, 2018 Venue: VMMC and Safdarjang Hospitals, Delhi

08:00 am - 05:00 pm Workshop 10: Comprehensive Colposcopy Workshop

CME Credit for Scientific Session 11 Hours

Message from the Senior Vice President for Strategy, RCOG

I am delighted to be here in Delhi as one of the Officers of the RCOG. I will be talking to you about health and Wellbeing in women who have reached the end of their reproductive Lives. In the Workshop on Menopausal Wellness I will be talking about women who have gone through the Menopause early for whatever reason, the issues they face and how they should be cared for. During the main meeting I will be talking about the care of women after cancer whatever their age and type of cancer and also participating in a 'Meet the Experts' session on contraception in women around the time of the Menopause. Hopefully these will be of interest to many of you.

My second Workshop is on Writing a Paper which I will be doing with Dr Patrick Chen and other colleagues involved in BIJOG which will be useful for all those who want to successfully publish their work and communicate with a wide audience.

I look forward to seeing many old friends and also making new ones.

Dr Mary Ann Lumsden
OBE, FRCOG
Senior Vice President for Strategy, RCOG

Message from the Vice President Clinical Quality RCOG UK

In the Scientific session of the 32nd AICC RCOG Annual conference, it is both my honour and delight to have been invited to present my team's work in new developments in the management of endometriosis and also the work the RCOG is doing around the UK in Maternity Safety. I greatly enjoy my visits to the beautiful country of India, especially making new friends and catching up with old colleagues.

Dr Edward Patrick Morris
FRCOG
Vice President, Clinical Quality, RCOG UK
Consultant, Department of Obstetrics & Gynaecology,
Norfolk and Norwich University Hospital.
Norfolk Endometriosis Centre Founder and Lead

Message from Past Chairperson AICC RCOG North zone

It is indeed a great pleasure for me to write this message and convey my heartiest congratulations to Dr Nirmala Agarwal, Dr Anita Kaul, Dr Arbinder Dang and all team members for organizing a superb Annual Conference of AICC RCOG. The hard work and enthusiasm of current organizing team is clearly visible in the ten pre and post conference workshops and excellent scientific programme during main conference, covering a wide range of contemporary and challenging issues. I am sure, all participants will find the program very interesting and rewarding.

I wish the conference a grand success.

Warm regards

Dr Sohani Verma
FRCOG
Sr Consultant Obstetrician Gynaecologist
Infertility & ART Specialist
Indraprastha Apollo Hospitals, New Delhi
Immediate Past Chairperson North Zone AICC RCOG (2012-2017)
Immediate Past President India Fertility Society (April 2016-March 2018)

Message from the Chairperson West Zone AICC RCOG

I am happy to note that the North zone of AICC RCOG is keenly organizing the Annual AICC RCOG conference under the able leadership of Dr Nirmala Agarwal assisted by her team. I note that there are wide ranging Pre Congress Workshops, Plenary lectures, Panel discussions and Debates with special emphasis on evidence based guidelines keeping post graduates desiring to do the exams in mind. With a large International and National Faculty of repute I am sure that the delegates will have a wide array of lectures in different sub specialties of Obstetrics and Gynaecology.

Along with my Members from the West zone, we wish the Organizing team the very best and look forward to the Nawabi Hospitality and Cultural delights that Delhi is so famous for.

Dr Ameet Patki
MD, DNB, FCPS, FICOG, FRCOG
Chair West Zone AICC RCOG

Message from the Chairperson East Zone AICC RCOG

It gives me great pleasure to know the AICC RCOG North Zone is organizing the 32nd AICC RCOG Annual Conference in New Delhi on 1st - 5th November, 2018.

The AICC RCOG Annual conference has become an important event in the national academic calendar. The conference in New Delhi has an impressive congregation of international and national speakers who I am sure will contribute to a grand academic feast. The timing of the conference is special, with pre-Diwali celebrations likely to light up the beautiful city of Delhi.

I congratulate your team for putting in place an attractive scientific programme and many workshops to suit the diverse interest of the delegates. I am looking forward to the meeting and wish you a successful conference.

With warm regards

Dr Bhaskar Pal
FRCOG
Chair, AICC RCOG East Zone

Message from the Chairperson North Zone AICC RCOG

I have great pleasure in welcoming you all to the 32nd AICC RCOG Annual conference as North Zone is hosting it from 1-5th November 2018 at Hotel Sheraton, Saket, New Delhi. We need to be abreast with the latest knowledge but, at the same time, keeping in mind ethical issues, hence the theme "Obstetrics & gynaecology: Evidence, Good Practice & controversies". We have had guidance from expert team of scientific committee to choose topics that are relevant in current day modern medicine.

We are privileged to have 14 renowned international speakers from UK and a vast number of national faculty who are experts in their field who will guide us through deliberations throughout the conference. We are fortunate that all 10 workshops are convened by UK faculty so that we learn from them.

The workshops and the main conference will be great learning experience for practicing gynaecologists, post graduate students and MRCOG aspirants as every topic in this conference is evidence based.

We have arranged for a "Gala Dinner" on 3rd November with theme "Delhi Through Ages" and you all have to come dressed accordingly! We will have a skit competition that night. Hope you enjoy the evening.

An 'On-line Quiz' has been going on 3 times a week for the last few weeks. I am told by quiz masters that it is a great success. The 4 finalists will be quizzed on stage on 4th November. Winner gets a 'Holiday of Your Dreams'.

We have had continuing guidance from AICC Chair Dr Suchitra Pandit and 3 zonal chairs, Dr Rekha Kurian, Dr Ameet Patki & Dr Bhaskar Pal. Our past chairpersons, Dr Sohani Verma & Dr Urvashi Prasad Jha have always guided us. Our Patron Dr Urmil Sharma is constantly encouraging us to do better. Patrons Dr SK Bhandari, Dr Mohinder Kochar & Dr Sheila Mehra are pillars of North Zone and are always with us when we need them.

We are fortunate to have very vibrant young enthusiasts in our society. It is indeed great pleasure working with them.

I am sure you all will have good time meeting your old friends here, learn something and take it with you..

With warm regards and best wishes

Dr Nirmala Agarwal
MBBS, DGO, MRCOG, FRCOG (UK)
Head of Department, Obstetrics & Gynaecology
Sant Parmanand Hospital, Civil Lines, Delhi 110054
Chair-person, Royal College of Obstetricians & Gynaecologists-North Zone, India
Organising Chairperson, 32nd AICC RCOG Annual Conference

Message from Vice Chairperson AICC RCOG North zone

Dear Friends,

We welcome you to 32nd AICC RCOG Meeting.

In accordance with the tradition of RCOG meetings, we have tried to put up an academic programme together which strengthens the foundations of our speciality as well as cater to the special interest groups by organizing workshops on a variety of subjects.

As a first for the North Zone, we are supporting the BJOG in bringing out a supplement which will focus on women's health priorities in India. This is to encourage our fraternity to publish and present data and find solutions to our problems.

We hope you are encouraged to participate in this endeavor by sending papers for publishing to the special link created for this purpose on the journal website.

Wishing everyone a Happy Deepawali with an abundance of good fortune.

Dr Anita Kaul
Diploma in Fetal Medicine (FMF-UK)
Diploma in Advanced Obstetric Scanning (London)
MS Obs-Gyn, FRCOG, FICOG
Clinical Director, Apollo Centre for Fetal Medicine
Apollo Indraprastha Hospital, Sarita Vihar, New Delhi
Vice Chairperson, Royal College of Obstetricians & Gynaecologists, North Zone, India
Organising Co-chairperson, 32nd AICC RCOG Annual Conference

Message from the Organising secretary and Editor's Desk

We cordially invite our privileged and honoured guests to the 32nd Annual Conference of All India Co- ordinating Committee of Royal College of Obstetricians and Gynaecologists of India', with the theme topic of "OBSTETRICS & GYNAECOLOGY: EVIDENCE, GOOD PRACTICE AND CONTROVERSIES".

Evidence based approach is not only recognized as the current standard of care, it is often necessary to provide the best management to the patient. Our International and National Guest faculty belonging to various specialities are doyens in their respective fields and will update and abreast us with current guidelines, best practice, controversies and recommendations on hot topics of OBGYN. We have divided the topics in scientific tracks, our aim being, to target and impart knowledge among general practitioners, specialists, trainees and postgraduates. There are 4 "Stump the experts" and 4 "Panel discussions" to provide ample scope for lively interaction among participating renowned expert faculty from several specialties. 28 Key notes and 36 guest lectures by International and National specialists will emphasise on practical and cumulative application of all modern concepts and techniques to optimize clinical management. 7 Breakfast/Meet the experts sessions with international faculty for face to face discussion based on evidence and latest recommendations will provide an excellent opportunity to clear all doubts and reach a consensus take home message.

A special session on Audit, Safety and NHS working in UK and MRCOG examination by RCOG UK faculty is introduced to provides benchmark for best quality care to patients and prevention of litigation. Trainees preparing for the examination will gain much by knowing the structure of UK framework. 2 Orations of East and North zone by Past AICC Chairman Dr P Das Mahapatra and Vice President RCOG UK Dr Alison Wright will discuss the latest controversial topics of "**Politics of the womb**" & "**Supporting our doctors in challenging times"** 10 Pre and Post conference workshops on BJOG author workshop, Urogynaecology video workshop, Preventing Stillbirths, Menopausal wellness, Fetal- maternal medicine, Obstetrics emergencies Skills and Drills, Reproductive Medicine- Clinical update, Perineal repair and Comprehensive colposcopy and LEEP Training workshops have been organized in the major hospitals in Delhi to provide unique opportunities to practising obstetricians and gynaecologists, general practitioners and budding trainees for in depth, focussed learning and interaction on a variety of current hot topics. A special workshop on training the USG trainers have been organised as a joint venture between FOGSI/RCOG UK to train all OBGYN practising Ultrasonologists as per international guidelines.

It is that time of the year again when we have the opportunity to look into the past to help understand & plan the future. 2017-2018, saw an exciting year full of academic activities, starting with our AICC RCOG North zone Annual Conference on Be Up To Date – RCOG Annual Professional Development Conference on 16th & 17th December, 2017 at Maulana Azad Medical College, Delhi. It was well attended by postgraduates and trainees and poster competition was a big draw and five pre and post conference workshops on How to Write A Paper and Publish, Gynaecare CTG Course, Fire Drills on Labour Ward: Managing of Obstetric Emergencies, Basic colposcopy and Advanced Colposcopy.

RCOG UK Franchise MRCOG Final Preparation Part II Written Course was held on 30th & 31st December 2017 and 1st January 2018 at the Academic Centre & on 31st May, 1st and 2nd June 2018 at Sant Parmanand hospital.

RCOG World Congress 2018 at Singapore 21st to 24th March 2018 at Suntec convention centre at Suntec city had North zone representation by Dr Nirmala Agarwal, Dr Arbinder Dang, Dr Mamta Dagar and Dr Seema Sharma.

AICC RCOG North zone under able leadership of Dr Nirmala Agarwal takes pride to inform that, we have the honour of first zone in India to host the MRCOG part 3 examinations to be held in November 2018. Preparation for the above has been in full swing starting from India steering group meeting at Singapore followed by Training the Zonal faculty on 30th June 2018 and 20th October 2018 at Delhi. This was followed by Part 3 MRCOG franchised revision course on 21st & 22nd October 2018 at Sant Parmanand hospital.

North zone bagged the prestigious Sims Black Professorship 2018 and Dr Patrick O Brien visited India and addressed

lectures to trainees, post graduates and general practitioners across 7 cities in July-August 2018.

The editorial team takes immense pleasure in presenting the proceedings of the annual conference 2017 and annual activities of RCOG NZ with photographs. All the above were made possible with the team effort of young, enthusiastic and dedicated fellows and members of RCOG-North zone, under the able and dynamic chairperson Dr. Nirmala Agarwal who has been our continuous source of encouragement.

We have messages from the Vice Presidents of Royal college of Obstetricians and Gynaecologists, Organizing chairperson, Vice Chairperson, Organizing secretary and Editorial desk.

Review of literature and abstracts and recommendations by International, National and guest faculty have been presented. The articles are printed as sent by authors to maintain individuality and convey the message which presenter would like to give directly. We are most grateful to all international, national faculty and contributing authors, who have put in their efforts and valuable time to share their knowledge and expertise with us.

We take the opportunity to convey our most sincere thanks to all the esteemed members of the faculty, workshop convenors, organising committee who have devoted their precious time and efforts to make this conference successful.

A list of sponsors has been included, who have helped and supported us to make this event a grand success. We wish to acknowledge and thank our administrative staff, all secretaries of Apollo hospitals, VMMC & Safdarjang hospital and Sant Parmanand hospitals for their continuing support in our endeavour.

A special thanks to Convenors and co convenors of all courses, for their unconditional support. Heartfelt thanks to Dr Nirmala Agarwal, our guiding light and Dr Anita Kaul, our positive sources of energy.

We are thankful to our sponsors, Mr. Rakesh Ahuja and his team at "Process and Spot" publications to prepare this souvenir and book of abstracts, Web Designer and Advertising- Mr Rakesh Rai, Event Management, Accommodation and Travel- Miss Carolina Fernandes, Mr Deepak Yadav, Mr Shaurya Singh, Advertising Partner Go Doctor Team - Mr Yogesh Jain, Miss Flourisha, Cine Focus India - Mr Prem Anand & Team, Administrative Assistance Mr Asif Munri, Mrs Geeta Rana, Mrs. Soma Sharma and staff and management of Hotel Sheraton.

We hope you would enjoy reading it and cherish it as a memento of our annual conference and that you enjoy the scientific programme. We look forward to your participation and feedback.

Please visit our website www.aiccrcognzindia.com for regular updates on our courses and other academic activities
With warm regards and best wishes.
"Live as if you were to die tomorrow. Learn as if you were to live forever."

Dr Arbinder Dang
MD, DNB, MNAMS, MRCOG (UK) Cert. Clinical Embryology. Diploma Endoscopy CICE France
Senior Consultant, Sant Parmanand Hospital, Civil Lines, Delhi54
Member Representative and Secretary. RCOG UK North Zone India
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32nd Annual Conference AICC RCOG
"Obstetrics & Gynaecology: Evidence, Good practice and Controversies"

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Dr Urmil Sharma
Dr Usha Bohra
Dr Usha Kumar
Dr Vandana Chaddha
Dr Vandana Narula
Dr Vanie Thapar
Dr Vanita Mittal
Dr Vatsala Dadhwal
Dr Vidya Gupta
Dr Vijay Zutshi
Dr Zarin Rahman
Dr Zeenie Girn

PRE CONFERENCE WORKSHOPS

1st November 2018, Thursday

	8:00 AM - 9:00 AM		Registration and Welcome Address	
	Timings	**Workshop**	**Convenors**	**Venue**
1.	09:00 AM - 02:00 PM	**BJOG Author Workshop**	Dr Patrick Chien (UK) Dr Mary Ann Lumsden (UK) Dr Anita Kaul	Auditorium Indraprastha Apollo Hospital Sarita Vihar, New Delhi
2.	02:00 PM - 06:00 PM	**Uro-Gynae Video Workshop**	Dr Edmund Neal (UK) Dr Nirmala Agarwal Dr Ranjana Sharma Dr Arbinder Dang	Auditorium Indraprastha Apollo Hospital, Sarita Vihar, New Delhi
3.	09:00 AM - 05:00 PM	**FOGSI/RCOG-USG Training The Trainers Workshop**	Dr Manjiri Khare (UK) Dr Meenu Agarwal	Auditorium (Basement) Indraprastha Apollo Hospital, Sarita Vihar, New Delhi

2nd November 2018, Friday

	07:00 AM - 08:00 AM		Registration and Welcome Address	
	Timings	**Workshop**	**Convenors**	**Venue**
4.	08:00 AM - 04:00 PM Hall B	**Reproductive Medicine – Clinical Update Workshop**	Dr Alka Prakash (UK) Dr Sohani Verma Dr Sweta Gupta Dr Puneet Kochhar	Hotel Sheraton, Saket, New Delhi
5.	08:00 AM - 01:00 PM Hall A	**Menopausal Wellness Workshop**	Dr Mary Ann Lumsden (UK) Dr Anjila Aneja Dr Jyoti Bhaskar	Hotel Sheraton, Saket, New Delhi
6.	08:00 AM - 04:00 PM Hall D Dynasty	**Obstetric Emergencies- Skill Based Workshop**	Dr Manjiri Khare (UK) Dr Poonam Tara Dr Jharna Behura	Hotel Sheraton, Saket, New Delhi
7.	08:00 AM - 04:00 PM Hall C	**Feto Maternal Medicine Workshop**	Dr Andrew Shennan (UK) Dr Anita Kaul Dr Vatsala Dadhwal Dr Chanchal Singh Dr Akshatha Sharma	Hotel Sheraton, Saket, New Delhi
8.	01:30 PM - 05:00 PM Hall A	**Preventing Still Births Workshop**	Dr Margaret Evans (UK) Dr Suchitra Pandit Dr Jasmine Chawla	Hotel Sheraton, Saket, New Delhi
9.	08:00 AM - 04:00 PM	**Perineal Repair Workshop**	Dr Alison Wright (UK) Dr Ranee Thakar (UK) Dr Nirmala Agarwal Dr A Dang	Academic Centre, B-235, B Block, C.R. Park, Delhi

5th November 2018, Monday

	Workshop	**Timings**	**Convenors**	**Venue**
	08:00 AM - 09:00 AM		Registration and Welcome Address	
10.	09:00 AM - 05:00 PM	**Comprehensive Colposcopy Leep Training Workshop**	Dr Margaret Cruickshank (UK) Dr Theresa Freeman Wang (UK) Dr Saritha Shamsundar Dr Mamta Dagar Dr Sweta Balani	VMMC & Safdarjung Hospital, Delhi

BJOG
An International Journal of Obstetrics and Gynaecology

BJOG Author and Peer Review Workshop

India Supplement: Priorities in Health Care for Women

Thursday 1st November, 09:00 - 14:00
Indraprastha Apollo Hospitals, New Delhi

09:00	**Greeting and introduction**	Anita Kaul
09:10	**Author resources you need to know about and publication ethics**	
	EQUATOR CONSORT, STARD, STROBE, PRISMA, MOOSE, CHEERS Registration – RCTs, systematic reviews Declaration of transparency, ethical approval, iThenticate	
09:45	**How journals can help you improve your paper**	
	Initial assessment – disclosure of interests, contribution to authorship, funding, acknowledgments Peer review Consults and editor feedback Revising your manuscript	
10:30	**How to make the most of your paper with value-added content**	
	Journal Club Podcasts Press Mini commentaries Supporting Information Videos	
11:00	**How you can make the most of your paper post-publication**	
	SEO Kudos Social media Reprints	
11:30	Break	
12:00	**Peer review workshop**	
	Why should you review for a journal? What to consider before accepting an invitation to review How to structure a review and support tools Conflicts of interest and confidentiality	
12:50	**Interactive session: What do you know about getting published?**	Delegates and Editors
	Audience discussion around things you need to know before submitting your paper.	
13:15	**Panel session: Ask the Editor**	Delegates and Editors
13:45	**Close**	

All topics covered by BJOG editorial board faculty

WHY YOU SHOULD ATTEND?

- Opportunity to learn teaching and training skills for ultrasound training as an ultrasound trainer.
- Learn about the RCOG ultrasound curriculum, how to teach a practical skill, structured approach in assessment, feedback and reflective learning as an ultrasound trainer, enhance your understanding of quality assurance in ultrasound training and evaluation
- Interactive workshop to teach ultrasound in a standardised manner and participate in interactive sessions with RCOG faculty members
- Access to RCOG assessment tools, feedback and evaluation, e-learning tools, blended learning and teaching styles.
- Tips on setting up an ultrasound training centre and hear the experience from the trainers that have already attended the course and implemented in their training programme.

BOOK YOUR PLACE

ONLY 20 PLACES

REGISTRATION FEE INCLUDES

- Entry to training premises
- Teaching material
- Lunch
- Certificate of attendance
- No Spot registration
- No refund Policy

COURSE FEES ₹10,000

For further details contact :

Dr. Meenu Agarwal

Tel : 9822036970

Email : drmjainagarwal@hotmail.com

Royal College of Obstetricians & Gynaecologists

RCOG FOGSI Collaboration Training the Ultrasound Trainers Workshop

WORKSHOP CONVENORS

Dr. Manjiri Khare
MD FRCOG
Ultrasound Officer
RCOG, UK

Dr. Meenu Agarwal
DNB , DGO , FICOG,
Bachelor in Reproductive Endoscopic Surgery (European Board Certified),
Diploma in MIS and ART (Germany)
Chairperson, Imaging Science Committee, FOGSI

DATE : 1/11/2018 | TIME : 9AM - 5PM
VENUE : Indraprastha, Apollo Hospital, Sarita Vihar, New Delhi - 110076

Third RCOG/FOGSI Collaborative, Training The Ultrasound Trainers Workshop (Pre Conference workshop AICC-RCOG 2018)

Date and Time: 1st November 2018 (9.00 am to 5.00 pm) | **Venue:** Indraprastha Apollo Hospital, Sarita Vihar, New Delhi

Convenors

Dr Meenu Agarwal
FOGSI Chair of Scientific Imaging Committee, India

Dr Manjiri Khare
RCOG Ultrasound Officer, UK

Faculty

Dr Meenu Agarwal, Pune
Dr Archana Baser, Indore
Dr Anita Kaul, New Delhi
Dr Manjiri Khare, Leicester, UK
Prof S Suresh, Chennai

The workshop includes lectures, interactive focus groups, videos, role play, simulation

08.45am	**Registration**	
Session 1		
09.00am - 09.10am	Welcome, icebreaker and round of introductions	All faculty
09.10am - 09.25am	Background and rationale for a 'Training the Ultrasound Trainers' course in Obstetrics and Gynaecology, RCOG/FOGSI collaboration	Dr Meenu Agarwal Dr Archana Baser Dr Manjiri Khare
09.25am - 09.40am	RCOG Ultrasound Curriculum for training	Dr Manjiri Khare
09.40am - 10.10am	Challenges for trainers and trainees in Ultrasound training for Obstetrics and Gynaecology in India	Interactive Group activity (All faculty)
Session 2		
10.10am - 10.35am	Adult learning, nontechnical skills and application in ultrasound training	Dr Manjiri Khare
10.35am - 10.50am	How to teach the clinical skills for ultrasound? Knobology, image optimisation, probe movements ?	Prof S Suresh
10.50am - 11.00am	**Cofeee Break**	
Session 3		
11.00am - 11.15am	How to teach early pregnancy scan?	Dr Archana Baser
11.15am - 11.30am	How to teach detailed anatomy scan?	Dr Manjiri Khare
11.30am - 11.45am	How to teach growth and Doppler assessment?	Prof S Suresh
11.45am - 12.00noon	How to teach transvaginal scanning in gynaecology?	Dr Meenu Agarwal
12.00noon - 12.15pm	How to write an ultrasound report?	Dr Archana Baser
12.15pm - 12.30pm	Quality and Standards for Ultrasound training	Prof S Suresh
12.30pm - 01.45pm	**Lunch and Inauguration of Workshop with Invited RCOG, FOGSI and AICC RCOG Dignatories)**	
Session 4		
01.45pm - 02.00pm	RCOG Work based assessments	Dr Manjiri Khare
02.00pm - 02.15pm	What is feedback and how to give feedback in ultrasound training?	Dr Manjiri Khare
02.15pm - 02.35pm	Breaking bad news Reflective learning as an ultrasound trainer	Dr Anita Kaul
02.35pm - 02.50pm	Giving and receiving feedback, Breaking bad news: Interactive role play activity using RCOG tool	Interactive group activity (All faculty)
Session 5		
02.50pm - 03.10pm	Resources for teaching ultrasound, E-learning resources, simulation and blended ultrasound training	Prof S Suresh Dr Anita Kaul Dr Manjiri Khare
03.10pm - 03.25pm	How to set up a FOGSI recognised centre for ultrasound training? Experience and tips on running a FOGSI recognised ultrasound training centre.	Dr Meenu Agarwal Dr Archana Baser
03.25pm - 03.40pm	**Coffee Break**	
03.40pm - 04.10pm	Hands on demonstration with ultrasound simulation	Prof S Suresh Dr Manjiri Khare
04.10pm - 05.00pm	**Panel Discussion** (interesting/challenging cases) Interactive quiz Snowball review of the day	Interactive group activity All faculty

UROGYNAECOLOGY VIDEO WORKSHOP

1ST NOVEMBER 2018 TIMINGS: 2:00 PM - 6:30 PM
VENUE: AUDITORIUM, INDRAPRASTHA APOLLO HOSPITALS

Royal College of Obstetricians & Gynaecologists
32nd Annual Conference
AICC RCOG
1st - 5th Nov, 2018 Delhi
Hosted by AICC RCOG North Zone

CONVENORS

Mr Ed Neale
BSc MB BS, FRCOG
Consultant Obstetrician and Gynaecologist at Bedford Hospital clinical and Divisional Director Urogynaecology

Dr Nirmala Agarwal
MBBS, DGO, MRCOG, FRCOG (UK)
Head of Department,
Obstetrics & Gynaecology
Sant Parmanand Hospital,
18 Sham Nath Marg, Civil Lines, Delhi
Chair-person, Royal College of Obstetricians & Gynaecologists - North Zone, India.

Dr Ranjana Sharma
MBBS, MD, MRCOG, FRCOG (UK)
Consultant Obstetrics & Gynaecology
Indraprastha Apollo Hospital,
Sarita Vihar, Delhi
Treasurer, Royal College of Obstetricians & Gynaecologists - North Zone, India.

Dr Arbinder Dang
MD DNB, MNAMS, MRCOG (UK),
Diploma Endoscopy CICE France.
Consultant Obstetrics & Gynaecology
Sant Parmanand Hospital,
18 Sham Nath Marg, Civil Lines, Delhi
Hon. Secretary, Royal College of Obstetricians & Gynaecologists - North Zone, India.

DESCRIPTION
Anatomically the Urological and Gynaecological organs are closely related, hence gynaecological problems can present with urinary symptoms and vice-versa. As function and dysfunction of Genital and Urinary tract are interrelated, it requires the expertise of both specialties which rationalizes this workshop.

Total no. of Delegates: 50

02:00 pm - 03:00 pm	**Chairpersons: Dr Madhu Ahuja, Dr Amita Jain**
02:00 pm - 02:30 pm	Anatomy of continence and pelvic support POPQ **-Dr Arbinder Dang**
02:30 pm - 03:00 pm	Physiology of Bladder Control **-Dr Nirmala Agarwal**
03:00 pm - 04:00 pm	**Chairpersons: Dr Shalini Rajaram, Dr Aruna Nigam, Dr Uma Swain**
03:00 pm - 03:30 pm	Interpreting URODYNAMIC Traces **-Dr Zeenie Girn**
03:30 pm - 04:00 pm	Management of the overactive bladder (Lifestyle changes, Bladder Retraining, Pharmacotherapy, PTNS and BOTOX) **-Dr Edmund Neale**
04:00 pm - 04:15 pm	Tea
04:15 pm - 06:30 pm	**Video Sessions (10 Min Video & 10 Min Discussion)**
Experts:	Dr Edmund Neale, Dr Nirmala Agarwal, Dr Shalini Rajaram, Dr Amita Jain, Dr Aruna Nigam, Dr Uma Swain, Dr Madhu Ahuja, Dr Sonal Bathla, Dr Zeenie Girn, Dr Rajesh Taneja
04:15 pm - 04:35 pm	NDVH : Tips and Techniques with videos **-Dr Shalini Rajaram**
04:35 pm - 04:55 pm	Abdominal Sacrocolpopexy **-Dr Sonal Bathla**
04:55 pm - 05:15 pm	Interstitial Cystitis **-Dr Rajesh Taneja**
05:15 pm - 05:35 pm	Burch Colposuspension **-Dr Amita Jain**
05:35 pm - 05:55 pm	Vaginal Hysterectomy with repair with Sacrospinous Ligament Fixation **-Dr Nirmala Agarwal**
05:55 pm - 06:15 pm	High Uterosacral Fixation **-Dr Uma Swain**
06:15 pm - 06:35 pm	Le Forts Repair **-Dr Amita Jain**

REGISTER AT WWW.AICCRCOGNZINDIA.COM

SECRETARIAT
RCOG North Zone Office, OT Complex 3rd Floor, Sant Parmanand Hospital, 18 Shamnath Marg, Civil Lines. Dehi-110054
Tel No – 91-11-23981260, 23994401-10 Ext 314 Email- rcogconference2018@gmail.com
Administrative Assistant Mr Asif Muniri +919560069925 / 9716801190

REPRODUCTIVE MEDICINE – CLINICAL UPDATE WORKSHOP

2ND NOVEMBER 2018 TIMINGS: 08:00 AM - 05:00 PM
VENUE: HALL B, HOTEL SHERATON, SAKET, NEW DELHI

Royal College of Obstetricians & Gynaecologists
32nd Annual Conference
AICC RCOG
1st - 5th Nov, 2018 Delhi
Hosted by AICC RCOG North Zone

CONVENORS

Dr Sohani Verma
MD, FRCOG
IVF Spl., Indiraprastha Apollo

Dr Alka Prakash (UK)
MD, FRCOG
IVF Spl., Cambridge, UK

Dr Sweta Gupta
MD, FRCOG
IVF Spl., Medicover Fertility Centre

Dr Puneet Kochhar
MD, MRCOG
IVF Spl., Elixir Fertility Centre

08:00 am	Registration
08:25 am	Welcome and Introduction to the Workshop
Session I	**Ovulation Induction (OI) and Ovarian Stimulation (OS)**
	Chairpersons: Dr Alka Prakash (UK), Dr Sweta Gupta, Dr Vanie Thapar
08:30 am - 08:45 am	Principles of OI/OS and Protocols - Dr Puneet Kochhar
08:45 am - 09:00 am	Update on OHSS: Prevention & Management - Dr Neena Malhotra
09:00 am - 09:15 am	Ovarian Stimulation in Diminished Ovarian Reserve (DOR) - Dr Sushma Sinha
09:15 am - 09:30 am	Ovarian Stimulation in PCOS - Dr Sonia Malik
09:30 am - 09:45 am	Audience interaction
Session II	**Newer Concepts**
	Chairpersons: Dr Nirmala Agarwal, Dr Sohani Verma, Dr Renu Mishra
09:45 am - 10:00 am	Imaging in Infertility: Relevant update for Clinical Practice - Dr Ashok Khurana
10:00 am - 10:15 am	What's New in Ovarian Stimulation - Dr Gouri M Devi
10:15 am - 10:30 am	HCG supplementation in ART: Before and After Ovulation - Dr Sudha Prasad
10:30 am - 10:45 am	Audience interaction
10:45 am - 11:15 am	**Tea Break**
Session III	**Fertility Preservation**
	Chairpersons: Dr Rashmi Sharma, Dr Leena Wadhwa, Dr Sarika Gupta
11:15 am - 11:30 am	Medical and Social Fertility Preservation: UK Experience - Dr Alka Prakash (UK)
11.30 am - 11.45 am	Retrieval and Cryopreservation of Mature and immature Oocytes and Ovarian tissue - Dr Pankaj Talwar
11:45 am - 12:00 pm	Safe and Effective Ovarian Stimulation in Cancer Survivors - Dr Sohani Verma
12:00 noon - 12:15 pm	Audience Interaction
Session IV	**Male Infertility and IUI**
	Chairpersons: Dr Sonia Malik, Dr Gauri M Devi, Mr Srikanth Doddamaneni
12:15 pm - 12:30 pm	Evidence based role of Medical Treatment for Male infertility - Dr Anjali Tempe
12:30 pm - 12:45 pm	Microfluidics in clinical ART - Dr K D Nayar
12:45 pm - 01:00 pm	Fine Tuning in IUI: Tips & Tricks - Dr Gita Radha Krishnan
01:00 pm - 01:15 pm	Audience interaction
01:15 pm - 02:00 pm	**Lunch**
Session V	**Key Note Lectures**
	Chairpersons: Dr U P Jha, Dr Kamal Buckshee, Dr S N Basu
02:00 pm - 02:20 pm	Mitochondrial Donation (Three parent IVF) - Dr Alka Prakash (UK)
02:20 pm - 02:50 pm	New Medical therapies for Endometriosis - Dr Edward Morris **(Vice President - Clinical Quality, RCOG UK)**
02:50 pm - 3:00 pm	Audience interaction
Session VI	**Dilemmas in ART**
	Chairpersons: Dr M Kochar, Dr Ameet Patki, Dr Puneet Kochar
03:00 pm - 03:15 pm	Intralipid therapy in previous implantation failure - Dr Neeta Singh
03:15 pm - 03:30 pm	Fresh vs. Frozen Embryo Transfer: Is the Jury still out? - Dr Tanya Buckshee Rohatgi
03:30 pm - 03:40 pm	Audience interaction
Session VII	**Clinical update on Invasive Adjuvant Therapies in ART**
	Chairpersons: Dr Mala Arora, Dr Surveen Ghumman, Dr Sudha Prasad
03:40 pm to 03:55pm	Endometrial scratching - Dr Kaberi Banerjee
03:55 pm to 04:10pm	G - CSF therapy - Dr Sweta Gupta
04:10 pm to 04:25pm	PRP Therapy and Activated PBMC therapy - Dr Uma Pandey
04:25 pm to 04:35pm	Audience interaction
04:35 pm	Vote of Thanks

For more details about this workshop, please contact :

Dr Sweta Gupta – swetagupta06@yahoo.com / 8130140007
Dr Puneet Kochhar – drpuneet.k20@gmail.com / 9953001628
Dr Sohani Verma – drsohaniverma@gmail.com / 9810116623

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Tel No – 91-11-23981260, 23994401-10 Ext 314 Email- rcogconference2018@gmail.com
Administrative Assistant Mr Asif Muniri +919560069925 / 9716801190

MENOPAUSAL WELLNESS

2ND NOVEMBER 2018 TIMINGS: 08:00 AM - 01:00 PM

VENUE: HALL A, HOTEL SHERATON, SAKET, NEW DELHI

Royal College of Obstetricians & Gynaecologists
32nd Annual Conference
AICC RCOG
1st - 5th Nov, 2018 Delhi
Hosted by AICC RCOG North Zone

CONVENORS

Prof. Mary Ann Lumsden
Senior Vice President of the Royal College of Obstetrics and Gynaecology,
London Professor of Medical Education & Gynaecology Consultant Gynaecologist,
School of Medicine,
University of Glasgow Glasgow Royal Infirmary

Dr Anjila Aneja
Director and HOD MAS Gynae
Fortis Gurgaon
Director Obstetrics and Gynae Fortis La Femme GK II

Dr Jyoti Bhaskar
Senior Consultant obstetrics and Gynaecology and Infertility Specialist,
Max Hospital Vaishali

08:00 am - 08:15 am	Registration
08:15 am - 08:20 am	Introduction

FIRST SESSION: BREAK THE BARRIERS

Chairpersons: Dr Maninder Ahuja, Dr Jyotsna Suri, Dr Sonal Batla, Dr Raka Guleria

8:20 am - 8:40 am	Premature Menopause – causes and management **Speaker:** Professor Mary Ann Lumsden
8:40 am - 8:50 am	Q & A
8:50 am - 9:10 am	Sexual health and Urinary incontinence in Menopause: Case base **Speaker:** Dr Renu Misra
9:10 am - 9:20 am	Q & A
9:20 am - 9:30 am	Inauguration and Lamp Lightning

SECOND SESSION: PERIMENOPAUSAL CHALLENGES AND SOLUTIONS

Chairpersons: Dr Mangla Dogra, Dr Ila gupta, Dr Deepti

9:30 am - 10:10 am	Panel discussion on perimenopausal bleeding and contraception **Moderator:** Dr S N Basu, Dr Chitra Setya **Panelists:** Dr Amita Suneja, Dr Achla Batra, Dr Neena Bahl, Dr Jyoti Aggarwal, Dr Ragini Aggarwal, Dr Sujata Bhat
10:10 am - 10:25 am	Obesity: Diagnosis, measurement & Management: Focus on women (especially Menopausal women) **Speaker:** Dr Anoop Misra
10:25 am - 10:30 am	Q & A

THIRD SESSION: HEAR FROM EXPERTS

Chairpersons: Dr Sonia Malik, Dr Meenakshi Ahuja, Dr Surjeet, Dr Monika Gupta

10:30 am - 10:50 am	HRT and Non HRT options for menopause: Drugs, Dosages and follow up. **Speaker:** Dr Jyothi Unni
10:50 am - 11:00 am	Q & A
11:00 am - 11:20 am	Prevention and Treatment of Osteoporosis. **Speaker:** Dr Ashok Kumar
11:20 am - 11:30 am	Q & A
11:30 am - 11:50 am	IMPART - e module learning on Menopause **Speaker:** Professor Mary Ann Lumsden

FOURTH SESSION: PANEL DISCUSSION

11:50 am - 12:50 am	Panel Discussion: HRT In Challenging clinical Scenarios
Case Base Discussions:	HRT after hysterctomy for severe endometriosis HRT for menopausal symptoms, HRT after Carcinoma of endometrium, ovary and cervix HRT in women with family history of breast cancer
Moderators:	Dr Anjila Aneja and Dr Jyoti Bhaskar
Panelists:	Prof. Mary Ann Lumsden, Dr Kiran Guleria, Dr Rupinder Sekhon, Dr Vandana Narula, Dr Geeta Chadha, Dr Geeta Mediratta, Dr Maninder Ahuja
12:00 noon - 01:00 pm	Audience Interaction

Let's us understand the importance of attending this Workshop:
It is eastimated that an Indian woman is likely to spend 30 yrs of her life in postmenopausal period.
By the year 2026 , 400 million women in India will be over age of 45 yrs.
We as gynaecologists, committed to woman's Health have to help these women age gracefully, live energetically, be healthy and happy.

This Menopausal Workshop provides us with the opportunity:
To update and learn the latest evidences and treatment modalities for menopause.
To discuss and interact with stalwarts in the menopausal field.

Come and shake your legs and energise our spirits with Zumba by Fortis Mamma Mia.

REGISTER AT WWW.AICCRCOGNZINDIA.COM

SECRETARIAT

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OBSTETRICS EMERGENCIES - "SKILLS AND DRILLS" BASED WORKSHOP

2ND NOVEMBER 2018 TIMINGS: 08:00 AM - 04:30 PM
VENUE: HALL D, HOTEL SHERATON, SAKET, NEW DELHI

Royal College of Obstetricians & Gynaecologists
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Hosted by AICC RCOG North Zone

DESCRIPTION

Obstetric emergencies are unplanned and often unanticipated, but the impact of these adverse events can be decreased with the use of training through simulation. "Fire drills and skills" using clinical scenarios and simulation (mannequins) are useful in managing critical emergencies effectively.

COURSE HIGHLIGHTS:

- All "Hands On" practical skills & drills.
- Teamwork training integrated with clinical teaching by highly experienced faculty.
- Drills on Simulators (mannequins)
- Practice of Surgical skills on specially designed uterine models
- Use of Protocols, Emergency kit tools, Algorithims
- Practice Overview of basic and advanced life support related to pregnancy

CONVENORS

Dr Manjiri Khare
MD, FRCOG
Consultant Feto Maternal Specialist, UK
Ultrasound Officer RCOG, UK

Dr Poonam Tara
MD, FRCOG, CCT (UK)
Diploma in Advanced Obstetric Scan (UK)
Accredited in Fetal Medicine (RCOG, UK)
Senior Consultant, Max Hospital, Saket

Dr Jharna Behura
MD, MRCOG (UK)
Fellowships in High Risk Pregnancy, Gynae Endoscopy
Senior Consultant, Obstetrician & Gynaecologist, Kasturba Hospital, Delhi

08:00 am - 08:30 am	Registration
08:30 am - 09:15 am	Interactive Session Maternal Cardiac Arrest and Advanced Life Support
09:15 am - 09:45 am	Neonatal Resuscitation

Stations (10:00 AM - 01:00 PM, 02:00 - 04:00 PM) 30 mins per station.

Station 1: Severe Preeclampsia & Eclampsia Management

Station 2: Maternal Collapse and Neonatal Resuscitation

Station 3: Major Obstetric Haemorrhage Management

Station 4: Surgical Management of PPH

Station 5: Breech Delivery

Station 6: Shoulder Dystocia

Station 7: Instrumental Delivery – Ventouse / Forceps

Station 8: CTG – Case Scenarios

Objective evaluation at the end of each station for each candidate

Delegates - 50 delegates

Faculty:

Dr Anjali Taneja, Dr Deepika Agrawal, Dr Meenakshi Sahu, Dr Jayasree Sundar, Dr Neema Sharma, Dr Mamta Dagar, Dr Mamta Mishra, Dr Sangeeta Gupta, Dr Shelly Arora, Dr Shweta Gupta, Dr Sonu Agrawal, Dr Vanita Mittal, Dr. Pulkit Nandwani, Dr Payal Singhal

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SECRETARIAT

RCOG North Zone Office, OT Complex 3rd Floor, Sant Parmanand Hospital, 18 Shamnath Marg, Civil Lines. Dehi-110054
Tel No – 91-11-23981260, 23994401-10 Ext 314 Email- rcogconference2018@gmail.com
Administrative Assistant Mr Asif Muniri +919560069925 / 9716801190

FETAL MATERNAL MEDICINE WORKSHOP

IN ASSOCIATION WITH THE AOGD FETAL MEDICINE SUB - COMMITTEE

2ND NOVEMBER 2018 TIMINGS: 09:00 AM - 04:30 PM

VENUE: HALL C, HOTEL SHERATON, SAKET, NEW DELHI

Royal College of Obstetricians & Gynaecologists
32nd Annual Conference
AICC RCOG
1st - 5th Nov, 2018 Delhi
Hosted by AICC RCOG North Zone

CONVENORS

Dr (Prof) Andrew Shennan
OBE, MBBS, MD, FRCOG,
Professor of Obstetrics
Clinical Director South London CRN
Department of Women and Children's Health, School of Life Course Sciences, FoLSM, Kings College London.

Dr Anita Kaul
Diploma in Fetal Medicine (FMF-UK),
Diploma in Advanced Obstetric Scanning (London),
MS Obs-Gyn, FRCOG, FICOG
Clinical Director, Apollo Centre for Fetal Medicine Indraprastha Hospital, Sarita Vihar, New Delhi
Vice- Chair-person, Royal College of Obstetricians & Gynaecologists- North Zone, India.

Dr Vatsala Dadhwal
MD, FICOG, FIMSA Professor,
Division of Maternal Fetal Medicine
Department of Obstetrics & Gynaecology,
All India Institute of Medical Sciences,
New Delhi

Dr Chanchal Singh Ahmad
MD, MRCOG, MFM Fellow(Singapore),
Senior Consultant,Fetal Medicine,
Birthright,by Rainbow Hospitals,
New Delhi.

Dr Akshatha Sharma
MS(ObGyn), MRCOG(UK)
Fellow in Fetal Medicine,
(FMF UK Accredited)
Consultant, Fetal Medicine
Indraprastha Apollo Hospitals, New Delhi

09:00 am - 09:25 am	Registration
09:30 am - 09:40 am	Introduction
09:45 am - 10:30 am	Preterm Labour – Screening methods, Intervention and the New Evidence in clinical practice. - Prof Andrew Shennan
10:30 am - 10:40 am	Audience Interaction
10:45 am - 11:30 am	Biomarkers for prediction of Adverse Outcomes - 1st, 2nd, 3rd Trimester - Prof Andrew Shennnan
11:30 am - 11:40 am	Audience Interaction
11:50 am - 04:30 pm	Interactive Stations with lunch break in between.
01:00 pm - 02:00 pm	Lunch
02:00 pm - 04:30 pm	**Interactive Stations**
Station 1:	**Growth restriction: Growth charts / Dppplers / CPR ratio. When to wait and how to treat ?** Dr Sangeeta Gupta, Dr Seetha R Pal, Dr Asmita Rathore
Station 2:	**Counselling for common fetal abnormalities / Amniocentesis/CVS (MRCOG exam points)** Dr Chanchal, Dr Chinmay, Dr Chinmayee Ratha, Dr Smriti Prasad
Station 3:	**First Trimester: Simulator/Flash cards: Various case scenarios** Dr Pradip Goswami , Dr Shantala Vadeyar, Dr Akshatha Sharma, Dr Saloni Arora
Station 4:	**CTG Interpretation** Dr Sujata Bhat, Dr Jyoti Bhaskar, Dr Mamta Mishra
Station 5:	**Genetics in Daily Practice (Hemoglobinopathies/etc)** Dr Seema Thakur, Dr Vandana Chaddha, Dr Neerja Gupta
Station 6:	**The Cradle Device and Preeclampsia Screening** Prof Andrew Shennan, Dr Mandakini Pradhan, Dr Manisha Kumar, Dr Rachna Gupta
Station 7:	**Fetal Therapy in Twins** Dr Anita Kaul, Dr Vatsla Dadhwal, Dr Aparna Sharma

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SECRETARIAT

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PREVENTING STILLBIRTHS

AICC - RCOG IN ASSOCIATION AND SUPPORTED BY SAFOG

2ND NOVEMBER 2018 TIMINGS: 01:30 PM - 05:00 PM
VENUE: HALL A, HOTEL SHERATON, SAKET, NEW DELHI

Royal College of Obstetricians & Gynaecologists
32nd Annual Conference
AICC RCOG
1st - 5th Nov, 2018 Delhi
Hosted by AICC RCOG North Zone

CONVENORS

Dr Margaret J Evans
Consultant Pediatrics and Perinatal Pathologist at the Royal Inrmary of Edinburgh

Dr Suchitra Pandit
Director -Surya Group of Hospitals Santacruz West Mumbai
Chair AICC - RCOG (2017-20)

Dr Jasmine Chawla
Senior consultant. Hindu Rao Hospital, Delhi

	Chairparsons: Dr Kiran Guleria, Dr Jyotsna Suri, Dr Jasmine Chawla
01:30 pm - 01:45 pm	Optimising Perinatal Outcome in Gestational Diabetes - Dr Mala Arora
01:45 pm - 02:00 pm	Can Perinatal Outcomes be Improved in Hypertension in Pregnancy - Dr Alpesh Gandhi
02:00 pm - 02:15 pm	Optimising Perinatal Outcome in 2nd Twin with Fetal Demise in One Twin - Dr Kavita Bapat
02:15 pm - 02:30 pm	Monitoring IUGR - Dr Sadhna Gupta
02:30 pm - 02:55 pm	Breaking Bad News About A Stillbirth and Delivering the Baby - Professor Margaret J Evans
02:55 pm - 03:10 pm	Managing A Case with Previous Stillbirth - Dr S N Pandit
03:10 pm - 03:35 pm	Demystifying The Placenta: Measures to Improve Perinatal Outcome - Professor Margaret J Evans
03:35 pm - 03:50 pm	Perinatal Audit Strategies – A Must For Every Maternity Unit - Dr Pratima Mittal
03:50 pm - 04:50 pm	Panel Discussion on Dilemmas In **'Salvaging The Lucky Little Ones'** **Moderators:** Dr Anuradha Wakankar & Dr Jyoti Unni **Panelists:** Dr Gazal Jain, Dr Chinmay Umarji, Dr Chinmayi (Chennai), Dr Reva Tripathi, Dr Jasmeet Arora, Dr Ashish Jain (Neonatologist), Dr Priti Gupta

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PERINEAL REPAIR WORKSHOP

THIRD AND FOURTH DEGREE PERINEAL TEARS & EPISIOTOMY

2ND NOVEMBER 2018 TIMINGS: 08:00 AM - 04:30 PM

VENUE: RCOG NORTH ZONE ACADEMIC CENTER & LIBRARY, B-235, C R PARK, NEW DELHI-

Royal College of Obstetricians & Gynaecologists
32nd Annual Conference
AICC RCOG
1st - 5th Nov, 2018 Delhi
Hosted by AICC RCOG North Zone

CONVENORS

Dr Alison Wright
FRCOG, Vice President for UK and Global Membership RCOG UK
Consultant Obstetrician and Gynaecologist Royal Free Hospital in London

Dr Ranee Thakar
MD FRCOG, South Asia Fellows representative on the RCOG council
Consultant Obs. & Urogynaecology Subspecialist, Croydon University Hospital, Croydon, Surrey
Honorary Senior Lecturer, St. George's University of London.

Dr Nirmala Agarwal
MBBS, DGO, MRCOG, FRCOG (UK)
Head of Department, ObGyn, Sant Parmanand Hospital, Delhi
Chairperson, RCOG-North Zone, India.

Dr Arbinder Dang
MD DNB, MNAMS, MRCOG (UK), Diploma Endoscopy CICE France.
Consultant ObGyn, Sant Parmanand Hospital, Delhi, Hon. Secretary, RCOG North Zone, India.

08:00 am - 08:15 am	Registration and Pre Workshop Survey
08:15 am - 08:30 am	Introduction
08:30 am - 09:15 am	Anatomy of The Pelvic Floor, Perineum and Anal Sphincters -Dr Ranee Thakar
09:15 am - 09:45 am	Anorectal Physiology -Dr Ranee Thakar
09:45 am - 10:30 am	Diagnosis of Anal Sphincter Injuries -Dr Ranee Thakar
10:30 am - 10:45 am	Coffee
10:45 am - 11:00 am	Video on Diagnosis
11:00 am - 11:30 am	2nd Degree Tears and Episiotomy -Dr Alison Wright
11:30 am - 11:50 am	Episiotomy Repair Video
11:50 am - 12:20 pm	3rd and 4th Degree Tears Repair -Dr Ranee Thakar
12:20 pm - 12:40 pm	Video - Repair of 3rd / 4th Degree Tears
12:40 pm - 01:00 pm	Prevention of OASIS -Dr Ranee Thakar
01:00 pm - 01:30 pm	Lunch
01:30 pm - 02:00 pm	Management of Complications of Vaginal Delivery -Dr Ranee Thakar
02:00 pm - 02:10 pm	Video of Episiotomy Repair in Animal Tissue
02:10 pm - 02:30 pm	Video on Anal Sphincter Repair in Pig
02:30 pm - 03:30 pm	Hands-on Repair of Anal Sphincter in Animal Tissue
03:30 pm - 04:00 pm	Post Workshop Survey -Dr Arbinder Dang
04:00 pm	Coffee & End

Workshop Partners: Johnson & Johnson, Gurugram

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COMPREHENSIVE COLPOSCOPY COURSE WITH HANDS-ON LEEP WORKSHOP

(In Association with the Indian Society of Colposcopy & Cervical Pathology)
(Approved by the International Federation of Colposcopy & Cervical Pathology)

Royal College of Obstetricians & Gynaecologists
32nd Annual Conference
AICC RCOG
1st - 5th Nov, 2018 Delhi
Hosted by AICC RCOG North Zone

5TH NOVEMBER 2018 TIMINGS: 08:30 AM - 05:00 PM

VENUE: OLD LT1, BEHIND NEW OPD BUILDING, SAFDARJUNG HOSPITAL, NEW DELHI

CONVENORS

Dr (Prof.) Margaret Cruickshank
FRCOG
Personal Chair (Clinical) Medical Education. Department of Obstetrics and Gynaecology Aberdeen Co-chair the Education and Training Committee of the International Federation of Colposcopy and Cervical Pathology (IFCPC).

Dr Theresa Freeman Wang (UK)
Honorary secretary of the British Society of Colposcopy & Cervical Pathology (BSCCP). Consultant Gynaecologist at The Portland Hospital for Women and Children and Whittington Health.

Dr Saritha Shamsunder
President, ISCCP – Indian Society of Colposcopy And Cervical Pathology
Senior Specialist & Associate Professor Ob/Gyn Vardhmaan Mahaveer Medical College & Safdarjung Hospital, New Delhi

Dr Mamta Dagar
Senior Consultant (Ob-Gyn) & Associate Prof. GRIPMER Gynae Endoscopic and Robotic Surgeon Sir Ganga Ram Hospital, New Delhi, India

Dr Sweta Balani
Hon Secretary
Consultant Obstetrician & Gynaecologist
SantParmanand Hospital, Delhi

08:30 am - 08:40 am	Registration
08:45 am - 09:00 am	Pre Test - Dr Zinee Girn & Dr Sheeba Marwah
09:00 am - 11:00 am	**SESSION I - Basics of Primary & Secondary Prevention** **Chairpersons:** Dr Priya Ganesh, Dr Achla Batra, Dr Raksha Arora, Dr Neelu Khaneja, Dr Puneet Chandna
09:00 am - 09:20 am	The Normal Cervix –Cytology & Histology Bethesda Classification of Abnormal Pap Smear - Dr Pooja Bakshi
9:20 am - 09:40 am	Human Papilloma Virus & Pathogenesis of HPV Related Disease - Dr Mamta Dagar
09:40 am -10:00 am	HPV Testing- Principles of Various HPV Tests, Indications - Prof. M Cruickshank
10:00 am - 10:20 am	Visual Methods of Cervical Screening - Dr Sonu Agarwal
10:20 am - 10:40 am	Vaccination for Cervical Cancer - Prof M Cruickshank
10:40 am - 11:00 am	Guidelines for Managing Screen Positive Women - Dr Neerja Bhatla
11:00 am - 11:30 am	Tea Break
11:30 am - 12:50 pm	**SESSION II - Basics of Colposcopy** **Chairpersons:** Dr Swaraj Batra, Dr Rupali Dewan, Dr Deepti Goswami, Dr Ruchi Pathak
11:30 am - 11:50 am	Tissue basis of Colposcopy - Dr Sweta Balani
11:50 am - 12:10 pm	Normal & Abnormal Colposcopy - Dr Theresa Freeman Wang
12:10 pm - 12:30 pm	IFCPC 2011 Terminology & Scoring - Dr Theresa Freeman Wang
12:30 pm - 12:50 pm	Glandular Lesions & Early Invasive Cancer - Prof. M Cruickshank

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12:50 pm - 01:50 pm	**SESSION III - Treatment of CIN** **Chairpersons:** Dr Pratima Mittal, Dr Devika Rathi, Dr Monika Gupta, Dr Anita Sabharwal
12:50 pm - 01:10 pm	Management of Low Grade CIN - Dr Theresa Freeman Wang
01:10 pm - 01:30 pm	Ablative Methods - Dr Saritha Shamsunder
01:30 pm - 01:50 pm	Management of High Grade CIN with Videos - Dr Veena Kaul
01:50 pm - 02:15 pm	**Lunch**
02:15 pm - 05:00 pm	**SESSION IV - Interactive Session**
02:10 pm - 02:45 pm	Picture Quiz - Dr Shalini Rajaram
02:45 pm - 03:45 pm	Interactive Case Discussions - Panel **Moderators:** Dr Vijay Zutshi & Dr Meena Nayak **Discussants:** Dr Theresa Freeman Wang, Dr M Cruickshank, Dr Veena Kaul, Dr Sunita Malik, Dr Gauri Gandhi, Dr Sarita Bhalerao
03:45 pm - 04:15 pm	Post Test & Discussion - Dr Zinee & Dr Sheeba Marwah
04:15 pm - 05:00 pm	Hands-On LEEP Session On Inanimate Models **Facilitators:** Dr Sujata Das, Dr Sarita Singh, Dr Sonu Agarwal Dr Pakhee Agarwal, Dr Aruna Nigam, Dr Roopa Hariprasad, Dr Lalita Verma, Dr Nisha Singh, Dr Shraddha Agarwal

Who should attend: Any doctors interested in Cervical Cancer Screening.

At the End of the Course Delegates Would be able to know:

- The Anatomy & Basis of Cervical Cancer Screening
- The Pathophysiology of HPV Infection and Related Diseases
- Be Sure of the Tissue Basis of Colposcopy
- Can Make A Colposcopic Diagnosis & Management Plan
- Set Up A Colposcopy Clinic

Course Fee: Rs. 3,000 (Inclusive of GST)

Registration link: http://aiccrcognzindia.com/courses/comprehensive-colposcopy-course

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Conference Programe

Scientific Session

Day 1

3rd November 2018, Saturday				**Hotel Sheraton, Saket, New Delhi**
07:30 am - 08:00 am	**Registration & Welcome Address**			
Timings	**Hall A**	**Hall B**	**Hall C**	**Hall D Dynasty**
08:00 am - 08:45 am	**Meet The Experts/ Breakfast Sessions**			
Hall Incharge	**Dr Mamta Dagar**	**Dr Shelly Arora**	**Dr Jharna Behura**	**Dr Anjali Taneja**
Chairpersons	Dr Pranathi Reddy Dr Alpesh Gandhi Dr Jyoti Bhaskar	Dr Shalini Rajaram Dr Madhu Ahuja Dr Pakhee Agarwal	Dr Rekha Kurien Dr Nirmala Agarwal Dr J B Sharma	Dr Archana Baser Dr Shantala Vadeyar Dr Akshatha Sharma
Topic	**Vaccination In Pregnancy**	**Contraceptive Methods and Issues around The Menopause**	**Selecting Medications for the Treatment of Urinary Incontinence**	**FGR and Doppler Interpretation**
Speakers	Dr Mayadevi Kurup	Dr Mary Ann Lumsden	Dr Ranee Thakar	Dr Manjiri Khare Dr Kuldeep Singh
08:45 am - 09:00 am	**Chairpersons:** Dr Suchitra Pandit, Dr Alka Kriplani **Professional Ethics For Doctors:** Dr Shekhar Agarwal			
09:00 am - 10:30 am	**Key Note Address**			
Scientific Tracks	High Risk Obstetrics	Operative Gynaecology	Pediatric / Adolescents Gynaecological Issues	Gynecological Oncology
Chairpersons	Dr Asmita Rathore Dr Kiran Guleria Dr Shakti Bhan Khanna	Dr Jaishree Gajaraj Dr Sudha Prasad Dr Shraddha Agarwal	Dr Amita Suneja Dr Sushma Sinha Dr Mayadevi Kurup	Dr Ramesh Sarin Dr Meena Naik Dr Pakhee Agarwal
09:00 am - 09:30 am	**1. Malposition of the fetal head complicating second stage of labour: Management** Dr Pranathi Reddy	**1. Delayed diagnosis of Endometriosis, why we should improve** Dr Edward Morris	**1. Adnexal Masses in Adolescents** Dr Shalini Rajaram	**1. Hormone replacement therapy following Breast and Gynaecological cancer** Dr Mary Ann Lumsden
09:30 am - 10:00 am	**2. Delivery decisions in Placenta Accreta** Dr Manjiri Khare	**2. Current Trends in Medical Management of Fibroids** Dr Suchitra Pandit	**2. Adolescent Dysmorphic Features: What a gyanecologist should know?** Dr IPS Kochhar	**2. 'Is breast cancer screening harmful or lifesaving? – Jury is still out'** Dr Partha Basu
10:00 am - 10:30 am	**3. Current recommendations on Induction of Labour in Previous Caesarean Section** Dr Jyoti Unni	**3. 'Postgraduate Gynaecology Surgical SimulationTraining in Scotland'.** Dr Patrick Chien	**3. Acute AUB: Management update** Dr Alka Kriplani	**3. Inherited Gynaecological cancer syndromes** Dr Rupinder Sekhon
10:30 am - 11:00 am	**Tea Break**			
11:00 am-12:00 noon	**Inauguration** **Master of Ceremony:** Dr Anjila Aneja, Dr Sweta Gupta			
Hall Incharge	**Dr Dang**			
12:00noon - 12:45pm	**Dr Tarun Banerjee Oration East Zone** **Politics of the womb - Dr P Das Mahapatra** **Chairpersons: Dr Sheila Mehra, Dr U P Jha, Dr Suchitra Pandit, Dr Bhaskar Pal**			
12:45 pm - 01:30 pm	**North Zone Oration Late Bhai Mohansingh and R P Soonawala Oration** **Supporting our doctors in challenging times - Dr Alison Wright** **Chairpersons: Dr Urmil Sharma, Dr S K Ghai Bhandari, Dr Ameet Patki, Dr Rekha Kurien**			
01:30 pm - 01:45 pm	Life Box Presentation			
01:45 pm - 02:30 pm	Lunch			
02:30 pm - 03:30 pm	Stump The Experts			
Hall Incharge	**Dr Zeenie Girn**	**Dr Jyoti Bhaskar**	**Dr Saritha Shamsundar**	**Dr Chanchal Singh**
Scientific Tracks	Acute & Early Pregnancy	Intrapartum	Preventive Oncology	PC & PNDT
Chairpersons	**Acute & Early Pregnancy Complications : Case based discussions**	**Abnormal CTG Traces: When and how to deliver**	**Challenging Cases in Colposcopy and Cervical Cancer Screening**	**PC & PNDT Act India Case Discussions on Sealing and Laws**
Moderators	Dr Mala Arora Dr Alpesh Gandhi	Dr Jyoti Bhaskar Dr Archana Baser	Dr Saritha Shamsundar Dr Sujata Das	Dr Chinmay Umarji

Panelists	Dr Shweta Gupta Dr Madhu Ahuja Dr Parul Chopra Dr Astha Thakkar Dr Puneet Kochhar Dr Pakhee Agarwal Dr Zeenie Girn Dr Rohan Purohit Dr Mayadevi Kurup Dr Sheela Mane	Dr Manavita Mahajan Dr Mamta Sahu Dr Mamta Mishra Dr Savita Singhal Dr Priti Gupta Dr Anjali Taneja Dr Kshama Uplenchwar	Dr Margaret Cruickshank (UK) Dr Theresa Freeman Wang (UK) Dr Veena Kaul (UK) Dr Vijay Zutshi Dr Shraddha Agarwal Dr Leela Digumarti Dr Susan John Dr Meena Naik Dr Tahir Malik	Dr Suchitra Pandit Dr Shelly Kamra Dr Abha Singh Dr K D Nayar Dr Nidhi Bhatnagar Dr Chitra Setya
03:30 pm - 05:00 pm	**Free Communications** 5 min Presentation + 2 min Discussion			
Judges	**Dr Chanchal Singh** **Dr Akshatha Sharma**	**Dr Manavita Mahajan** **Dr Jharna Behura** **Dr Pulkit Nandwani**	**Dr Jyoti Bhaskar** **Dr Mamta Mishra** **Dr Anjali Taneja**	**Dr Mamta Dagar** **Dr Mamta Sahu** **Dr Puja Thukral**
	1. Aetiological Classification of Stillbirths: A Case Control Study **Monika Chaudhary** **OP OBS 11** 2. Noninvasive fetal lung maturity testing - Quantus FLM **Shantala Vadeyar** **OP FM 1** 3. Prenatal Diagnosis in Genetic Conditions - DNA Banking to the Rescue! **Shruti Bajaj** **OP FM 4** 4. Study of MTHFR gene mutations and other risk factors in Recurrent Pregnancy Loss **Rini Pachori** **OP FM 5** 5. Retrospective analysis of cause of stillbirth in previous pregnancy: Study from a tertiary care government hospital in North India **Shruti Jain** **OP PC 1** 6. First Trimester Prediction Of Preeclampsia In A Low Resource Setting : Comparing Performance of MC, MAP and a combination of MC and MAP **Saloni Arora** **OP FM 12** 7. Aorto-pulmonary septal defect : prenatal diagnosis by fetal echo , its association with non-cardiac anomalies and post-natal confirmation by autopsy **M Monica Reddy** **OP FM 6**	1. Ohvira syndrome (obstructed hemivagina and ipsilateral renal agenesis) with uterus didelphys: a case report **Khushboo Malhotra** **OP G 5** 2. Management of unilateral kidney with hydroureteronephrosis in a case of MRKH **Arpita De** **OP G 2** 3. Managing pelvic adhesions in TLH : Tricks and Techniques **Latika Chawla** **OP E 2** 4. Scar ectopic pregnancy: successful endoscopic management **Deepika Singh** **OP E 1** 5. Clinical profile, surgical approach and outcomes of complicated genital fistulae in urban population of a developing nation **Preeti Yadav** **OP U 1** 6. Estimation of the 10-year Probability of Osteoporotic Fracture in Postmenopausal Indian Women With FRAX score. **Ruchi Joshi** **OP G 3** 7. Ovarian cancer **Kavita Danodia** **OP GO 2** 8. Aggressive angiomyxoma **Devi Krishna** **OP G 6**	1. First Trimester Prediction Of Preeclampsia In A Low Resource Setting : Development of mean arterial pressure nomogram and studying its performance. **Saloni Arora** **OP FM 2** 2. Abdominal wall endometriosis after caesarean section: A preventable complication **Parul Bhugra** **OP G 1** 3. Association of mRNA expression of interleukin-6 and interleukin-10 with organochlorine pesticides **Deepika** **OP OBS 8** 4. Association of Apolipoprotein e gene polymorphism and serum TNF alpha with lipid profile in preeclmpsia **Lal NS** **OP OBS 3** 5. Examining caesarean delivery rates using the Robsons ten group classification. **Varsha Maran** **OP OBS 10** 6. Cardiovascular and pregnancy outcome in women with congenital complete heart block: A single center experience from South India. **Ashwini Radjaramin** **OP FM 3**	1. Efficacy of betadine vaginal toileting before cesarean section in postoperative infections. **Tarang Preet Kaur** **OP PC 3** 2. Retrospective study of non – obstetric pain abdomen in pregnancy: a review **Shweta Gangal** **OP OBS 9** 3. To reduce or not to reduce? – Single centre experience of perinatal outcomes following reduction in twin pregnancies. **Smriti Prasad** **OP FM 10** 4. Clinical outcome of post placental Copper T380A and Copper 375 IUCD insertion in women delivering by caesarean section **Divya** **OP RM 1** 5. Incidence of uterine sarcoma in women presenting with AUB with pelvic mass in rural population of Chhattisgarh **Meena Naik** **OP GO 4** 6. Cervical intraepithelial neoplasia with aggressive tumor biology with high risk HPV infection in early pregnancy - a rare case **Sahana Sreenivas** **OP OBS 12** 7. Stillbirth:- Is it preventable? **Sparsha** **OP PC 2**

	8. To study the outcome of pregnancy in patients with cardiomyopathies **Astha Jain OP OBS 5** 9. Prediction of adverse effects of preeclampsia **Khushboo Tongaria OP OBS 7** 10. "Stuck Prosthetic Valve : A Life-threatening Complication in a Pregnant women with Mechanical heart Valve" **Jyoti Baghel OP M 3** 11. Role of genetic evaluation in the index pregnancy **Aditi Agarwal OP FM 11** 12. Foetal adrenal gland volume a novel predictor of onset of labour **Sapna Vinit Amin OP OBS 18**	9. m-RNA expression of E-cadherin and vimentin and p53 immunohistochemistry in epithelial ovarian cancer **Suman Chaudhary OP GO 1** 10. Minimally invasive management of placenta accrete syndromes **Pakhee Aggarwal OP E 3** 11. Ovarian malignancy in pregnancy **Deepti Pachauri OP G 7** 12. Effect of yoga therapy on maternal stress and clinical outcomes among low risk antenatal women: A randomised controlled trail **Nikita Bhartia OP HOG 1**	7. Analyse the rare causes of hypertension in pregnancy which was not pregnancy related but presented for first time in pregnancy **Sangeeta Yadav OP FM 8** 8. Acute fatty liver of pregnancy- review of successful management of three cases at tertiary care center **Manjushree B S OP FM 9** 9. Impact of body mass index on the outcome of in-vitro fertilization outcome in indian PCOS women **Sweta Gupta OP RM 3** 10. Intracytoplasmic sperm injection with assisted oocyte activation resulting in successful pregnancies and live birth in couples with globozoopsermia. **Puneet K Kochhar OP RM 2** 11. Comparative study of Genetic Variation in IL-1 RN gene in Preterm and Term Labour **Shreshtha Gupta OP M 8** 12. Contraceptive choice opted by women during postpartum period in a tertiary care centre **Prateek Gupta OP M 9**	8. Prevalence of Gestational Thrombocytopenia and fetomaternal outcome **Neha OP OBS 4** 9. Study on evaluating the effectiveness of fetal scalp lactate sampling in the assessment of fetal well-being during labour **Krishnaveni Nayini OP OBS 2** 10. A case series study on atypical tubal ectopic pregnancies **Renuka Kumari OP MYG 2** 11. Role of internal iliac artery embolization in control of PPH **Nirupama Sakhadeo OP OBS 15** 12. Sublingual Misoprostol as An Adjunct to Oxytocin During Cesarean Delivery in Women at Risk of Postpartum Hemorrhage **Shabnum Ara OP OBS 17** 13. Neuraxial Anaesthesia during Labor: Experience in our Hospital **Niharika Thakur OP OBS 18**
05:00 pm - 06:00 pm	**AICC General Body Meeting**			
08:00 pm onwards	**Banquet: Dynasty Hall & Pool Side** **Theme: "Delhi Through The Ages"** **Master of Ceremony:** Dr Jasmine Chawla			

Scientific Session

Day 1

4th November 2018, Sunday				**Hotel Sheraton, Saket, New Delhi**
07:30 am	**Registration Opens at 07:30 am**			
Timings	**Hall A**	**Hall B**	**Hall C**	**Hall D Dynasty**
Hall Incharge	**Dr Pulkit Nandwani**	**Dr Sweta Gupta**	**Dr Dang**	
08:00 am - 08:45 am	**Breakfast Sessions**			**Free Communications** 5 min Presentation + 2 min Discussion
Chairpersons	Dr Vijay Zutshi Dr Gauri Gandhi Dr Mamta Dagar	Dr Neelam B Vaid Dr Gita Radhakrishnan Dr Neema Sharma	Dr Jayasree Sundar Dr Meenu Agarwal Dr Sangeeta Gupta	**Judges:** Dr Neema Sharma Dr Sonu Agarwal Dr Zeenie Girn
Topics	**What's New in Cervical Cancer Vaccination**	**Quality and Safety in second stage of labour - Have we lost the art of instrumental delivery**	**Preterm Labour Global Trends & New Research**	1. A study of Insulin resistance in PCOS women **Geethanjali G OP G 4**
Speakers	Dr Margaret Cruickshank	Dr Alison Wright	Dr Andrew Shennan	

08:45 am - 09:00 am	**Chairpersons:** Dr Sunita Mittal, Dr Sohani Verma **Professional Ethics For Doctors:** Dr Shekhar Agarwal			2. Sigmoid volvulus in pregnancy **Megha Panwar** **OP M 5** 3. Pregnancy and labor outcomes in squat versus western style sitting toilet users: a pilot study **Pooja Singh** **OP M 2** 4. A study of maternal risk factors in preterm labour and PPROM and their neonatal outcomes **Ankita Jain** **OP OBS 16** 5. Successful medical management of Uterine arterio-venous malformation after failed uterine artery embolization: A Rare case scenario **Preeti Yadav** **OP MYG 1** 6. Post-partum haemorrhage in vaginal deliveries: Risk factor analysis in a tertiary care setting. **Saumya Kulshrestha** **OP M 7** 7. Rare presentation of asymptomatic severe endometriosis (grade 4) **Varun Khandelwal** **OP OBS 13**
09:00 am - 10:00 am	**Guest Lectures**			**Free Communications**
Scientific Tracks	Contraception	Cosmetic Gynaecology	MRCOG Curriculum, Exams and Latest Developments/ RCOG Audit and Safety	
Chairpersons	Dr Achala Batra Dr Basab Mukerjee Dr Uma Pandey	Dr Rekha Kurien Dr Saritha Shamsundar Dr Susheela Gupta	Dr Bhaskar Pal Dr Ameet Patki Dr Anita Kaul	**Judges:** Dr Jaysree Sunder Dr Jasmine Chawla Dr Monika Bhatia Nagpal Dr Deepti Goswami
09:00 am - 09:20 am	**1. Update on hysteroscopic sterilization** Dr Arbinder Dang	**1. Benign vulval dermatoses and vulval itching: current management** Dr Margaret Cruickshank	**1. Overview MRCOG examination/NHS Structure/ Work based assessments** Dr Edmund Neale	1. Urine Albumin Creatinine Ratio An early marker of pregnancy related outcomes: A prospective observational study **Gazala Shahnaz** **OP OBS 1** 2. Acute Disseminated Encephalomyelitis: A rare complication of Varicella Zoster infection in a pregnant women **Taruna Sharma** **OP OBS 14**
09:20 am - 09:40 am	**2. A review of contraceptive methods in women with medical disorders** Dr Sunita Mittal	**2. Vulvodynia: An enigma** Dr Theresa Freeman Wang	**2. Key Messages From The Uk And Ireland Confidential Enquiries Into Stillbirths** Dr Margaret Evans	
09:40 am - 10:00 am	**3. Emergency contraception** Dr Madhu Ahuja	**3. Breast reconstruction and Oncoplasty** Dr Ramesh Sarin	**3. Human factors and safety culture in maternity** Dr Edward Morris	

				3. A Comparative study of Anti mullerian hormone in PCOS and normally ovulating women **Geethanjali G OP M 1** 4. Term pregnancy in a woman with incomplete transverse vaginal septum- An interesting case. **Jyotsna Sharma OP M 4** 5. Irregular antibody screening for women with significant obstetric history and fetal hydrops **Aastha Raheja OP FM 7** 6. Vulvar dermatofibrosarcoma protuberans: a rare case with a broad differential diagnosis **Vartika Srivastava OP GO 3** 7. Fetal outcome in pregnancy with Gestational Diabetes **Sameena Naz OP M 6** 8. Unusual Presentation of Angular Pregnancy **Swathi K OP OBS 6**
10:00 am - 11:00 am	**Panel Discussions**			
Scientific Tracks	Post Partum Complications	Infections in Obstetrics	Prenatal Diagnosis and Genetics	Endometriosis
Hall Incharge	Dr Anjila Aneja	Dr Jharna Behura	Dr Akshatha Sharma	Dr Sweta Gupta
	Post Partum Hemorrhage Case Based Discussions	**Infections in Obstetrics Case Based Discussions**	**Management of Abnormal Maternal Serum Screening: Case scenarios**	**Controversies in Managing Endometriosis in an Infertile Couple**
Moderators	Dr Anjila Aneja Dr Aruna Murlidhar	Dr Jayasree Sundar Dr Jharna Behura	Dr Sangeeta Gupta Dr Akshatha Sharma	Dr Neena Malhotra Dr Sweta Gupta
Panelists	Dr Shelly Arora Dr Pulkit Nandwani Dr Jyoti Kankanala Dr Renu Lakhtakia Dr Sushma Sinha Dr Deepti Goswami Dr Usha Bohra	Dr Sandip Biswas Dr Meenakshi T Sahu Dr Pooja Thukral Dr Partha Bhattacharyya Dr Zarin Rahman Dr Rajendra Nakhare Dr Sanchita Dube	Dr Prathima Radhakrishnan Dr Pradip Goswami Dr Shantala Vadeyar Dr Chanchal Singh Dr Tulika Tayal Dr Seema Thakur Dr Vatsala Dhadhwal Dr Poonam Tara	Dr Narmada Katakam Dr Kaberi Banerjee Dr Latika Chawla Dr Lahori Roy Dr Puneet R Arora Dr Deepa Thiagarajamurthy Dr Usha Kumar Dr Tanya B Rohtagi Dr Diksha Goswami Dr Sujoy Dasgupta
11:00 am - 11:30 am	**Tea Break**			
Hall Incharge	Dr Zeenie Girn	Dr Chanchal Singh	Dr Mamta Dagar	Dr Neema Sharma
11:30 am - 01:30 pm	**Key Note Address**			
Scientific Tracks	Urogynaecology	Fetal Medicine and Growth	Fertility Issues	Endoscopy
Chairpersons	Dr Amita Jain Dr Dharmesh Kapoor Dr Divya Singhal	Dr Poonam Tara Dr Pradip Goswami Dr Nutan Agarwal	Dr Sonia Malik Dr Anjali Tempe Dr Kaberi Banerjee	Dr PD Tank Dr Malvika Sabharwal Dr Anjila Aneja
11:30 am -12:00 noon	**1. Obstetric Anal Sphincter Injuries- The story so far** Dr Ranee Thakar	**1. Congenital Abnormalities Following Assisted Conception-is there an increase ?** Dr Shantala Vadeyar	**1. Azoospermia - what next?** Dr Ameet Patki	**1. Failed hysteroscopy: What next** Dr Rekha Kurien

12:00 noon - 12:30 pm	**2. Native tissue repair for prolapse: a possible alternative to mesh** Dr J B Sharma	**2. Growth charts -Which ones to use WHO/Intergrowth/ Customised?** Dr Anita Kaul	**2. Achieving delivery in women with premature ovarian insufficiency** Dr Sohani Verma	**2. Troubleshooting in gynaecological minimally invasive surgery** Dr Jaishree Gajaraj
12:30 pm - 01:00 pm	**3. Update on the use of vaginal mesh for urinary incontinence and prolapse** Dr Edmund Neale	**3. Prediction of stillbirths in 3rd trimester: Where are we now?** Dr Andrew Shennan	**3. Follicular monitoring in Ovulation induction** Dr Meenu Agarwal	**3. Safe guarding ureters in laparoscopy** Dr Bhaskar Pal
01:00 pm - 01:30 pm	**4. Interstitial Cystitis- What a gynaecologist should know.** Dr Rajesh Taneja	**4. Fetal USG meets Genetics** Dr Prathima Radhakrishnan	**4. Emerging treatments of adenomyosis related to infertility** Dr Asha Baxi	**4. Robotic Surgery in Gynecology** Dr U P Jha
01:30 pm - 02:30 pm	**Lunch Break**			
Hall Incharge	Dr Anjila Aneja	Dr Akshatha Sharma	Dr Jharna Behura	Dr Dang
02:30 pm - 03:30 pm	**Guest Lectures**			
Scientific Tracks	Medical Disorders in Pregnancy	Neonatology	Psychosocial and Mental Health in Obstetrics	Reproductive Endocrinology
Chairpersons	Dr Sunesh Kumar Dr Usha Bohra Dr Mamta Sahu Dr Renu Lakhtakia	Dr Margaret J Evans Dr Vidya Gupta Dr Anil Sabharwal	Dr Abha Sharma Dr Mamta Mishra Dr Meenakshi Sahu	Dr Pratima Mittal Dr Nymphaea Walecha Dr Kaberi Banerjee Dr Astha Gupta
02:30 pm - 02:50 pm	**1. Why Mother's Die in India** Dr P D Tank	**1. Whole body hypothermia for perinatal asphyxia** Dr Raghuram Mallaiah	**1. Should all OBG trainee have awareness regarding Domestic Violence?** Dr Zeenie Girn	**1. Hyperprolactinaemia and female reproductive function: Revisited** Dr Uma Ram
02:50 pm - 03:10 pm	**2. Managing pregnancies post renal transplant** Dr Basab Mukerjee	**2. Improving outcomes in preterm deliveries: Ante and Intrapartum interventions** Dr Andrew Shennan	**2. Post partum depression/ psychosis management** Dr Nikita Rawal	**2. Effect of obesity on assisted reproductive treatment outcomes and its management** Dr SN Basu
03:10 PM - 03:30 PM	**3. Pregnancy with connective tissue disorder** Dr Asmita Rathore	**3. Neonatal resuscitation: Recent guidelines** Dr Gaurav Jawa	**3. Management of pregnancies with Drug dependency** Dr Jasmine Chawla	**3. Polycystic ovary syndrome and the differential diagnosis of hyperandrogenism** Dr Neema Sharma
3:30 PM- 4:30 PM	**Guest Lectures**			
Scientific Tracks	Trials in Obgyn	Good Practice	Controversies	Integrated Obstetrics, Prenatal Bonding and Aspects of Antenatal & Intrapartum Care
Chairpersons	Dr Meenakshi T Sahu Dr Renu Laktakia	Dr Shakti Bhan Khanna Dr Neema Sharma	Dr Pooja Thukral Dr Anjali Taneja	Dr Nikita Rawal Dr Jasmine Chawla Dr Mohanjeet Juneja Dr Himani Arya
03:30 pm - 03:45 pm	**1. CHAMPION Trial** Dr Uma Pandey	**1. Cognitive behaviour therapy for menopausal symptoms** Dr Veena Kaul	**1. Prediction and prevention of preeclampsia** Dr Pradip Goswami	**1. Prenatal bonding** Dr Nitika Sobti
03:45 pm - 04:00 pm	**2. ASPRE/SPREE Trial** Dr Mandakini Pradhan	**2. Evaluation of Uncomplicated Stress Urinary Incontinence in Women Before Surgical Treatment** Dr Dharmesh S Kapoor	**2. Dialogue: Thrombocytopenia in pregnancy** Dr Shelly Arora Dr Shweta Gupta	**2. Analgesia for labour: an evidencebased insight** Dr Deepak Krishna
04:00 pm - 04:15 pm	**3. Antenatal Corticosteroids: current recommendations** Dr Monika Bhatia	**3. Role of Imaging in Gynaecological cancer** Dr Parveen Gulati	**3. CFDNA – Extended OR Basic ?** Dr Chanchal Singh	**3. Teenage pregnancy issues** Dr Mamta Dagar
04:15 pm - 04:30 pm	**5. WOMAN TRIAL 2017** Dr Sonu Agarwal	**4. Mullerian anomalies and vaginal reconstruction** Dr Sonal Bathla		**4. If there is a previous preterm labour: How should we treat current pregnancy** Dr Pulkit Nandwani
04:30 pm - 05:00 pm	**Valedictory**			

Acknowledgements and Sincere Thanks

MedMidas

Fortis La Femme

Life Cell

Rainbow Children's Hospital

Perkin Elmer

Mr BG Bangur- Shree Cements Ltd.

Cord Life

Dr Shekhar Agarwal

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FORTHCOMING ACTIVITIES

Royal College of Obstetrics & Gynaecology
AICC North Zone India

Chairperson: Dr Nirmala Agarwal (n.menoky@gmail.com / 9811888732)
Vice Chaiperson: Dr Anita Kaul
Hon. Secretary: Dr Arbinder Dang (arbidang@gmail.com / 9871356917)

RCOG UK FRANCHISED MRCOG: Part II Revision Course

13th – 15th December 2018
COURSE FEE: Rs 35000/-
*Certificate of attendance for this course will be provided by the RCOG UK
Venue: Sant Parmanand Hospital, 18 Shamnath Marg, Civil Lines Delhi-110054, India

Course Convenor
Dr Sanjeev Sharma (UK)
Dr Nirmala Agarwal (India) – (n.menoky@gmail.com)
Dr Sweta Gupta (India) – (swetagupta06@yahoo.com, 8130140007)
Dr Jharna Behura – (jharnabehura@yahoo.co.in/ 9810247593)
Dr Jasmine Chawla & Dr Shelly Arora

Limited Seats
40 Candidates only

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SECRETARIAT

RCOG North Zone Office, OT Complex 3rd Floor, Sant Parmanand Hospital, 18 Shamnath Marg, Civil Lines. Dehi-110054
Tel No – 91-11-23981260, 23994401-10 Ext 314 Email- rcogconference2018@gmail.com
Administrative Assistant Mr Asif Muniri +919560069925 / 9716801190

FETAL MEDICINE FOUNDATION INDIA

The Fetal Medicine Foundation India

For more details,
visit www.fmfindia.in

FMFI INITIATIVE

1. **Outreach Programmes:**
   To reduce maternal and perinatal morbidity and mortality and birth defects in India by increasing the number of trained professionals in basic ultrasound scanning skills which help in detecting a number of problems - placenta previa, multiple pregnancy, fetal malposition, malformations and abnormal fetal growth. This is being done through skill based workshops with live demonstrations, didactic lectures, hands on training in Tier 2 and Tier 3 cities of India.

Photo Credit: Global Giving, UK

2. Facilitate research and generation of Indian data in the field of Fetal Medicine (currently supporting research at Municipal Hospital Delhi, Govt Hospital Nagpur)

3. Support the *Look for Life* Initiative of Fetal Medicine Foundation UK

An Overview of the Activities of the AICC RCOG Northern Zone India Committee 2017-2018

"If everyone is moving forward together, then success takes care of itself." Henry Ford

Site: **www.aiccrcognzindia.com**
E mail: **rcognz2017@gmail.com: n.menoky@gmail.com**
Secretariat: OT Complex 3rd Floor Sant Parmanand Hospital, Delhi 110054
Academic Centre & Library - B-235 CR Park, New Delhi-110019
Legal Status - Society
Registered Charity (u/s12A) DEL- RR 22975 - 05062013/1847 Since 05.06.13
U/S 80G - DEL - RE 25104 - 03122013 / 3892 Dated 03/12/2013

"Teamwork is the ability to work together toward a common vision. The ability to direct individual accomplishment toward organizational objectives. It is the fuel that allows common people to attain uncommon results." -Andrew Carnegie

We are honored to write this report of the activities of the AICC-RCOG Northern Zone India Committee, an organization of academic excellence in the field of obstetrics and gynaecology, the goal being to provide quality patient care and setting standards in accordance with international standards. Over the last few years, it has grown phenomenally, thanks to the hard work and team spirit of our patrons, fellows, members and associate members. The organizing committee is grateful to all who have helped us grow leaps and bound and thankful for the continuing good work. The academic activities of the year 2017- 2018 were based on the theme of Be Up To Date – RCOG Annual Professional Development and highlighted the importance of team work to enhance patient care and avoid litigation. On philanthropic front, under the aegis of RCOG North zone, department of Obstetrics and gynaecology, Sant Parmanand hospital, Civil Lines, Delhi conducted Cervical Cancer Prevention Camp on 29th April 2018 to create an awareness about cervical cancer and screen women 25 years and above with Primary HPV testing.




Chairperson	:	Dr Nirmala Agarwal
Vice Chairperson	:	Dr Anita Kaul
Treasurer	:	Dr Ranjana Sharma
Web Editor	:	Dr Anjila Aneja
Hon Secretary	:	Dr Arbinder Dang
Additional Executive Fellow	:	Dr Saritha Kale Shamsunder
Senior Advisors	:	Dr U P Jha, Dr Sohani Verma Dr Mala Arora
Immediate Past Chairperson	:	Dr Sohani Verma

India North Zone International Representative Comittee

Fellows	:	Dr Anita Kaul Dr Ranjana Sharma Dr Anjila Aneja
Members	:	Dr Arbinder Dang Dr Sweta Gupta Dr Mamta Dagar
Patrons	:	Dr Urmil Sharma Dr S K Ghai Bhandari Dr Sheila Mehra Dr M Kochhar Dr R P Soonawala Dr Prathap C Reddy Dr Ashok Chauhan Dr Sanjeev Sharma (UK) Dr Prabha Sinha (UK)




Annual activities 2017-2018, started with

AICC RCOG North Zone Annual Conference 2017

Be Up To Date – RCOG Annual Professional Development Conference

on 16th & 17th December, 2017 at Maulana Azad Medical College, Delhi. It was well attended by postgraduates and

trainees and poster competition was a big draw. All the latest Green top Guidelines along with EMQ and SBA's discussed in great detail.





There were 3 Pre-conference workshops on 15th December 2017 at Maulana Azad Medical College and 2 Post-conference workshops on 18th & 19th December 2017 at Sant Parmanand Hospital.

- How to Write A Paper and Publish
- Gynaecare CTG Course
- Fire Drills on Labour Ward: Managing of Obstetric Emergencies
- Basic Colposcopy
- Advanced Colposcopy



RCOG UK Franchise MRCOG Final Preparation Part II Written Course

30th & 31st December 2017 and 1st January 2018.

Venue: Academic Centre & Library, B-235 CR Park, New Delhi-110019

Convenors: Dr Sanjeev Sharma (UK), Dr Nirmala Agarwal, Dr Sweta Gupta, Dr Kavitha N (Malaysia), Dr Jharna Behura, Dr Jasmine Chawla Sharma, Dr Shelly Arora







RCOG World Congress 2018 at Singapore

21st -24th March 2018. Suntec Convention Centre at Suntec City.

AICC RCOG North zone fellows and members Dr Nirmala Agarwal, Dr Seema Sharma, Dr Mamta Dagar & Dr Arbinder Dang attended the world congress.

Dr Nirmala Agarwal attended IRC meeting and meeting of India Steering Group at the World Congress. She chaired session on Medical disorders unveiled by pregnancy, Pregnancy in women with spinal injuries, Medical emergencies in labour wards, Thrombophilia in pregnancy: when to screen? And Mechanical prosthetic heart valves in pregnancy.

Dr Arbinder Dang attended Perineal Repair Workshop and India Steering Group meet at World Congress 2018.

Dr Mamta Dagar presented poster and attended Colposcopy workshop.





Cervical Cancer Prevention Camp

29th April 2018

Department of Obstetrics and Gynaecology at Sant Parmanand Hospital in association with Friends of Sant Parmanand, under the aegis of AICC RCOG NZ, ISCCP, DGF and Cervical Cancer and Breast cancer awareness committee of AOGD with the aim to create an awareness about cervical cancer and screen women 25 years and above with Primary HPV testing. 63 women enrolled, 30% were aware of cervical cancer. 6.3% were positive for high risk HPV. AICC RCOG NZ were thankful to management of Sant Parmanand Hospital & Friends of Parmanand for support.


Colposcopy and LEEP Workshop

May 2018 at Sant Parmanand hospital, Delhi
Organized by AICC RCOG North zone and ISCCP
Convenors: Dr Nirmala Agarwal, Dr Saritha Shamsundar, Dr Mamta Dagar and Dr Sweta Balani.

RCOG UK Franchised MRCOG Final Preparation Part II Written Course

Date: 31st May, 1st and 2nd June 2018

Venue: Sant Parmanand hospital, Delhi

Convenors: Dr Nirmala Agarwal, Dr Sweta Gupta, Dr Kavitha N (Malaysia), Dr Jharna Behura, Dr Jasmine Chawla Sharma, Dr Shelly Arora

Course was cancelled, but on popular demand by exam going trainees, a CME of Part 2 Revision Course was held and attended by 9 delegates.




Training the Trainer Program for MRCOG Part 3 Examination Faculty (Examiners and Lay Examiners)

Date: 30th June and 1st July 2018

Venue: Indraprastha Apollo Hospital, Delhi.

RCOG UK in association with AICC RCOG North Zone hosted the "Training the trainers" for Fellows and members and Training the Lay examiners at all India level.

Convenors: Dr Edmund Neale, Dr Lisa Joels (MRCOG part 3 examination subcommittee RCOG UK).

TOT course was a great learning experience for all 50 faculty from all zones of India.


Examinations Conducted: Part I & Part II MRCOG Theory Examinations

2nd and 3rd July 2018

Convenors: Dr JB Sharma, Dr Nirmala Agarwal

Sims Black Travelling Fellowship Professorship Lectures

26th July to 7th August 2018

The Sims Black Fellowship fund was created in 1951 by Sir Arthur and Lady Sims, their daughter Mrs Margaret Black, and Messrs Cooper, Triffitt and Company to enables practising obstetricians and gynaecologists, who are RCOG Fellows or Members, to visit countries overseas, to further the aims of the College. In 2018, Sims Black travelling fellowship was awarded to India. Dr Patrick O' Brien, Consultant Obstetrician & Gynaecologist, University College London Hospitals, was awarded the Professorship.

His visit started from Nagpur, FOGSI Gestosis conference, where he delivered the Sim's Black Gestosis oration on «Should all women have the right to a Caesarean section? " His next destination was Kolkota, where he stayed for 2 days and addressed the trainees and postgraduates and was organized by RCOG East zone chairperson Dr Bhaskar Pal and president OGYN society of Bengal Dr Basab

Mukherjee. He subsequently visited Lucknow, organized by Secretary of OBGYN society Dr Priti Kumar. On 1st August 2018, he visited Delhi, and delivered Sims Black lecture on "Should all women have the right to request Caesarean Section?" and on Recent advances in managing PPH: tranexamic acid and carbetocin. In Delhi it was organized by RCOG North zone chairperson Dr Nirmala Agarwal in collaboration with Dr Shalini Rajaram Professor, UCMS and GTB hospitals. His lectures were attended by Emeritus professors, senior faculty of medical colleges, private practitioners, trainees and postgraduates in large numbers and lectures were well appreciated with lots of audience interactions. After Delhi, he visited Cochin, and Chennai, where he interacted with about 60 students of Sri Ramachandra Medical College and 240 practising gynaecologists of Chennai & delivered 3 lectures." His final port was Mumbai where his professorship lecture was organized by West Zone Chairperson Dr Ameet Patki.

We thank the Royal College UK to grant this fellowship to India and hope to get this esteemed travelling professorship for India in future as well.






Members of RCOG who were elevated to Fellows of RCOG 2017-2018

- Dr Vinita Jaggi Kumar
- Dr Jaysree Sundar
- Dr Neema Sharma
- Dr Seema Sharma
- Dr Puja Dewan
- Dr Kaushiki Dwivedee
- Dr Zeenie Girn
- Dr Jasmeet Monga

Philanthropic Activities

RCOG North Zone supported a project in Lal Bahadur Shastri Municipal Hospital by providing Computer and Software to initiate the provision of fetal medicine services to the pregnant women of the hospital. Dr Anita Kaul, senior consultant and staff of Apollo Centre for Fetal Medicine are running the clinic 3 days a week whilst GE and Astraia Germany have partnered with this charitable activity by providing the Ultrasound Machine and the Obstetric Database application. A special thanks to RCOGNZ member Dr Neema Sharma who set up the meeting with the Hospital Medical Superindentent Dr Amita Saxena and got the initiative going.



Okti Foundation, Delhi in collaboration with Sant Parmanand Hospital, Rural Committee of Indian Menopause Society, Association of Obstetricians & Gynaecologists of Delhi & RCOG NZ organized nine surgical ventures in seven Indian states in year 2017-18. A total of 274 poor patients got benefited from surgeries and many got the advantages of the awareness and the screening programme.

Surgical Ventures

- Duncun Hospital, Raxaual, Bihar, 11th September to 12th September 2017 in which 27 patients were operated free of cost.
- Civil Hospital, Joginder Nagar, Mandi, Himachal Pradesh on 3rd & 4th November 2017 in which 31 patients were operated free of cost.
- Sahayak Surgical Centre, Manali, Himachal Pradesh from 10th to 12th November 2017 in which 24 patients were operated free of cost.
- Lehmon Hospital Herburtpur, Uttrakhand in which 29 patients were operated free of cost.
- Nagaland in Dec 2017 in which 68 patients were operated free of cost.
- Sant Parmanand Hospital in Dec 2017 in which 20 patients from remote locations were brought to Delhi for surgery.
- Civil Hospital, Joginder Nagar, Mandi, Himachal Pradesh from 27thApril to 29thApril 2018 in which 25 patients were operated free of cost.
- Sahayak Surgical Centre, Manali, Himachal Pradesh from 23rd June to 24th June 2018 in which 25 patients were operated free of cost.
- Dr Prabhu's Hospital, Totu, Shimla in August 2018, in which 25 patients were operated free of cost.

Forthcoming Activities

- 32nd AICC RCOG Annual Conference to be held from 3rd & 4th November 2018 at Sheraton Hotel, Saket, New Delhi
- 1st, 2nd & 5th November 2018 : Ten Pre and Post conference workshops: BJOG Author and Peer Review Workshop, Fetal Maternal Medicine Workshop, Menopausal Wellness Workshop, Obstetric Emergencies Skill Based Workshop, Perineal Repair Workshop, Preventing Stillbirths Workshop, RCOG-FOGSI Training the Trainers Franchised Course, Reproductive Medicine – Clinical Update Workshop, Urogynaecology Video Workshop and Comprehensive Colposcopy& LEEP Course.
- MRCOG Final Preparation: Part 3 Practical Course for Faculty Training on 20th October 2018, hosted by AICC RCOG North zone.
- MRCOG Franchised Part 3 Revision course in October 2018
- MRCOG Non-franchised Part 3 CME in October 2018
- MRCOG Franchised Part 2 Revision course on 13-15th December 2018
- MRCOG Part 3 Examination in November 2108.
- MRCOG Examination Part 1 & 2 in January 2019.

Academic Centre & Library

The RCOG North Zone India Centre whilst being a temple of academic activities continues to bond us, the RCOG North Zone fraternity. We thank all the administrative staff of Sant Parmanand hospitals, secretaries and a special thanks to Mr Asif Muniri -Administrative assistant ph: +919560069925/+919716801190 who has to multitask many times, to keep our flag fl ying. We profusely thank our course convenors and convenors of various workshops for their diligent work and continuous support given to our organization.

A special Heartful thanks to our vice Chairperson Dr Anita Kaul who is guiding us silently behind the scenes.

We are also profusely thankful to Administrative Management of Hotel Sheraton, Indraprastha Apollo hospitals management, Fortis Le Femme Hospitals, VMCC & Safdarjang hospitals, Mr Gautam Agarwal CEO Medmidas, Publisher Mr Rakesh Ahuja, Web designer Mr Rakesh Rai who is doing an excellent work in keeping our website updated and for facebook adverts, Event manager and travel experts Miss Carolina Fernandez, Mr Deep Kumar and Audio visual expert Mr Prem Anand.

It has been the vision and determined motivation by all our patrons, our dear Chairpersons and now are present Chairperson Dr. Nirmala Agarwal to develop the various courses to an excellent standard and persue academic excellence.

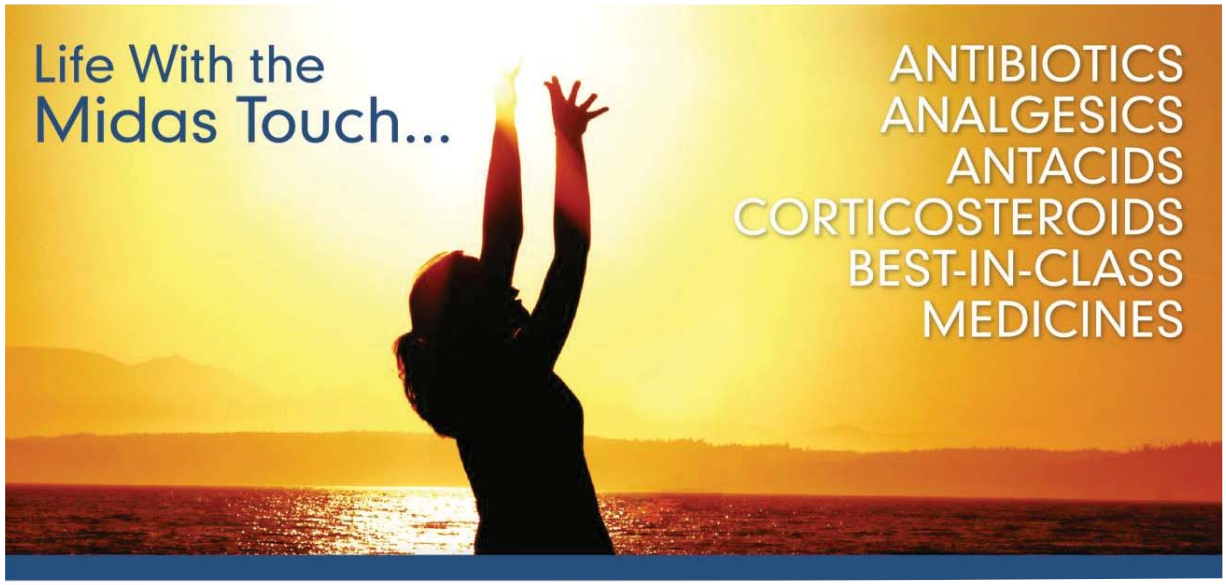
"Synergy - The bonus that is achieved when things Work Together Harmoniously."

Mark Twain

Dr Niramala Agarwal, FRCOG (UK)
Head of the Department & Senior Consultant,
Sant Parmanand Hospital, Delhi
Chairperson AICC RCOG North Zone

Dr Arbinder Dang, MD, DNB, MNAMS, MRCOG (UK)
Senior Consultant, Sant Parmanand Hospital, Delhi
Honorary Secretary AICC RCOG North Zone

Dated: 14.10.2018



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Royal College of Obstetricians & Gynaecologists

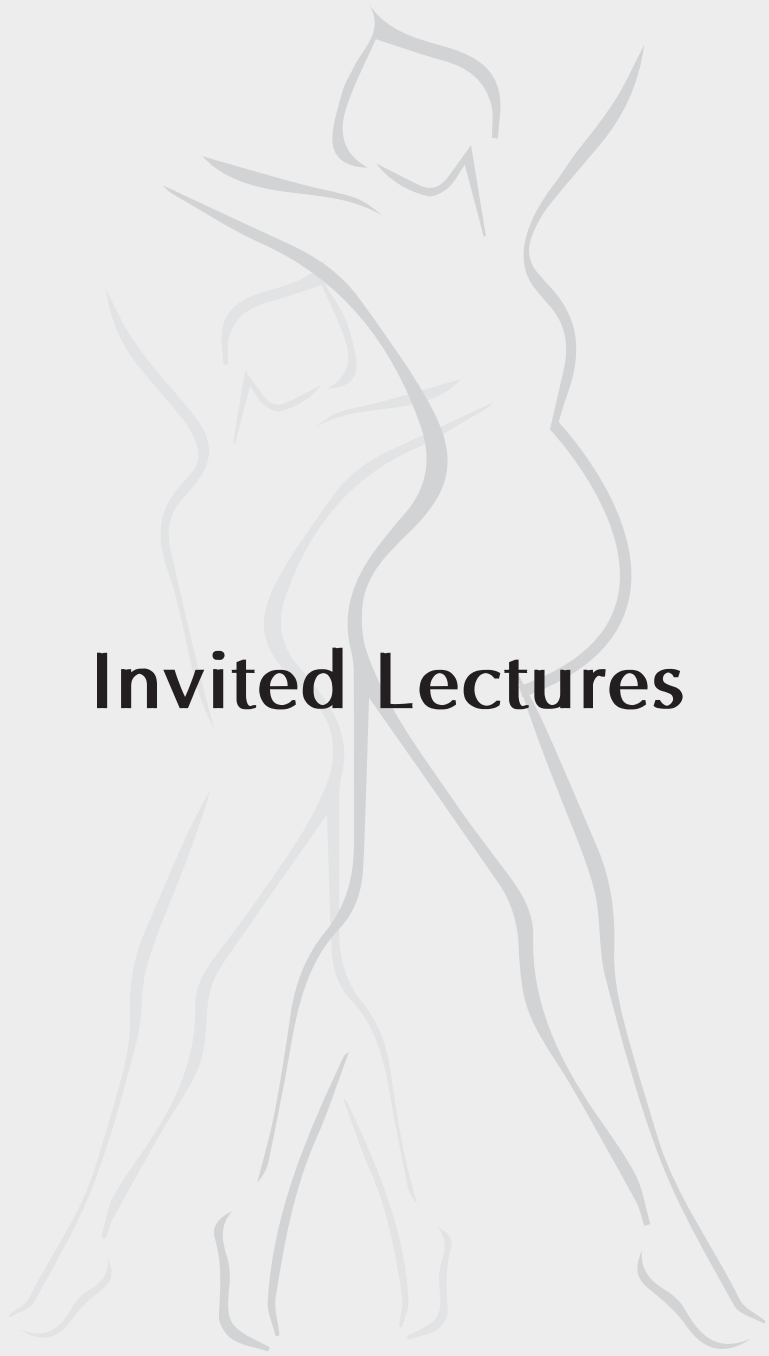
RCOG World Congress 2019

London, UK - 17-19 June

In 2019 the RCOG World Congress is returning to the UK! The Congress will be held at the ExCeL in London bringing together the latest advancements in research, professional development as well as key issues in O&G. This is a truly global event for anybody interested in women's healthcare.

Save the date in your diary and join in the conversation on social media using **#RCOG2019**

Find out more at rcog.org.uk/london2019



Invited Lectures

Ranee Thakar
MD, FRCOG
South Asia Fellows Representative on the RCOG Council
Consultant Urogynaecologist, Croydon University Hospital, Croydon UK

Obstetric Anal Sphincter Injuries (OASIS) - Prevention, Repair and what to do in the Next Delivery?

Perineal trauma is a highly prevalent condition. The short- and long-term morbidity associated with perineal repair can lead to major physical, psychological, and social problems. Although it would be impossible to completely prevent perineal trauma, it could be minimised. Proven strategies include the practice of perineal massage in the antenatal period, use of warm perineal compresses in the second stage of labor, restrictive use of episiotomy, preference of a correctly performed mediolateral over a midline episiotomy, and the use of a vacuum extractor instead of forceps for instrumental delivery. Recent years have witnessed a growing interest in the technique of manual perineal protection as a means to reduce anal sphincter trauma. It is possible that one intervention on it's own may not be as beneficial as a combination of interventions and therefore "care bundles" have been suggested.

In order to standardise the classification of perineal trauma, the Royal College of Obstetricians and Gynaecologists (RCOG) has adopted a classification that is also recommended by the International Consultation on Incontinence. Prior to repair correct diagnosis of the tear is vitally important. To enable accurate diagnosis a systematic vaginal and rectal examination should be carried out on all women who have a vaginal delivery. The external anal sphincter (EAS) (striated muscle) is a distinct red coloured muscle while the internal anal sphincter (IAS) (smooth muscle) is pale in colour. Repair is carried out according to the grade of tear. The sphincter muscles are repaired with 3-0 polydioxanone (PDS) dyed sutures. When the internal anal sphincter is torn, it should be repaired using an end-to-end repair with interrupted or preferably mattress 3-0 PDS sutures. When the EAS is only partially torn (grade 3a and some 3b), then an end-to-end repair should be performed using two or three mattress sutures instead of haemostatic figure-of-eight sutures. If there is a full thickness EAS tear (some 3b, 3c, or fourth-degree), either an overlapping or end-to-end method can be used with equivalent outcome. After repair of the sphincter, the perineal muscles should be sutured in a systematic manner to reconstruct the perineal body.

A rectovaginal examination should be performed to confirm adequate repair, check that no additional injuries have been missed, and ensure that all packs or swabs have been removed. Intravenous broad-spectrum antibiotics such as cefuroxime 1.5 g plus metronidazole 500 mg or coamoxiclav 1.2 g should be commenced intra-operatively and continued orally for at least 3 days. Severe perineal discomfort, particularly following instrumental delivery, is a known cause of urinary retention, and is more likely after regional anesthesia, as it can take up to 12 hours before return of bladder sensation. A Foley catheter should be inserted for about 24 hours. Detailed notes should be made of the findings and the repair. As passage of a large bolus of hard stool may disrupt the repair, a stool softener (lactulose 15 mL bd) is prescribed for up to 10 days postoperatively.

Patrick Chien
MBChB MD FRCOG
Deputy Editor-in-Chief. BJOG
Consultant / Honorary Senior Lecturer in Obstetrics and Gynaecology at Ninewells Hospital and Medical School, Dundee, Scotland, UK.
Co-opted member of the Scottish Committee of the RCOG.
Examiner for the MRCOG examination.
Course convener and member of the teaching faculty for the Laparoscopic Surgical Course for Gynaecologists
Medical Director of the Scottish Hydatiform Mole Follow-up service.

Postgraduate Gynaecology Surgical Simulation Training in Scotland

Although the curriculum for postrgraduate surgical training in gynaecology is determined nationally in the UK by the Royal College of Obstetricians and Gynaecologists (RCOG), the delivery of the training to achieve the competency levels required for this training is delivered locally by individual hospital gynaecological units. This is further aided by the attendance to formal surgical training courses and the Surgical Skills Centre (SSC) at the Dundee Institute of Healthcare Simulation is the main provider of such courses for trainees in obstetrics and gynaecology in Scotland.

The SSC was founded in 1992 by Professor Alfred Cushieri and funded by the University of Dundee in partnership with NHS Education for Scotland and several key industry entities. It currently provides a large range of multidisciplinary skills training courses in laparoscopic and general surgical skills in a variety of other surgical specialties (e.g. general surgery, ENT, endoscopy, urology, orthopaedics, gynaecology, general practice, and anaesthesia) at basic, intermediate and advanced levels. The mission of the centre is to provide high quality skills training to meet the learning requirements of local, national and international healthcare professionals within the surgical specialties.

Within gynaecology, the courses available are Key Skills in Laparoscopic Surgery, Key Skills in Hysteroscopy, Key Skills in Laparoscopic Suturing, Thiel-fixed Cadaveric Course in Laparoscopic Hysterectomy and Thiel-fixed Cadaveric Course in Laparoscopic Pelvic Floor Surgery. With our recent collaboration with the Centre of Anatomy and Human Identification, University of Dundee, we have pioneered the use of Thiel embalmed cadavers to be used for postgraduate surgical training. The ethos of the teaching places emphasis on hands-on practical training on inanimate and animal tissue models as well Thiel-fixed cadavers. Other teaching formats such as the use of virtual reality training are also employed. As little amount of time on these courses are spent on didactic lectures and live-linked surgery. Each year, there are approximately over 500 delegates being trained in this centre covering 106 surgical specialities.

The SSC, in conjunction with the Institute for Medical Science and Technology, University of Dundee also conducts research on surgical ergonomics and also develops novel equipment for surgery. The centre also offers postgraduate degree level training in minimally access surgery by research.

In order to minimise risks to patients, there is increasing emphasis to provide postgraduate surgical training using simulation in order to avoid early training being conducted on patients. This approach is supported by trainees and patient support groups as well as the General Medical Council in the UK.

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Congenital Abnormalities following Assisted Conception – Is there an increase?

Assisted reproductive technology (ART) accounts for 1-4.3% births all over the world and this figure is expected to rise. Since the birth of the first baby in 1978, more than 5 million babies have been born using ART. Whilst application of ART has certainly helped millions of infertile couples to have babies, health of these babies was a concern raised since the late 1980s. However, the evidence has been conflicting and confounding.

There could be multiple plausible reasons why babies born from ART are at higher risk for adverse outcomes and congenital malformations than babies conceived spontaneously. However, evaluating and understanding the evidence is the aim of this talk. Apart from congenital abnormalities, aneuploidy and implications for health and disease for these ART babies will be addressed. Finally, the implications for prenatal diagnosis and fetal medicine for ART babies will be discussed.

We will have to come to some consensus regarding the information that should be shared with couples undergoing ART so that they can make informed choices regarding their offspring.

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Adnexal Masses in Adolescents

Adnexal masses are uncommon in adolescents, of which 9% to 11% are malignant[1]. Adolescents with adnexal masses commonly present with abdominal pain, nausea, and vomiting or pressure effects. Uncommonly they can also present with menstrual abnormalities or precocious puberty. It is important to form a useful differential diagnosis while evaluating any adolescent with an adnexal mass. The origin of the adnexal mass can be an ovarian, tubal, paratubal or a Mullerian anomaly. The possibility of pregnancy or PID must also be kept in mind while evaluating an adolescent. There is a need to form separate guidelines pertaining to adolescents to prevent overtreatment, to allay unnecessary anxiety in patients and parents and most importantly to preserve fertility. RCOG does not have specific guidelines for management of adnexal masses in adolescents which prompted the British Society for Paediatric and Adolescent Gynecology to bring out their own guidelines[2].

Forming a useful differential diagnosis

The first step in managing a patient with adnexal mass is forming a differential diagnosis. (Table 1)

Table 1: Differential Diagnosis of Adnexal Masses in Adolescents

- GYNAECOLOGIC :
  - Ovarian pathology
    - Simple cysts
    - Endometrioma
    - Cystic, solid and solid-cystic ovarian tumors
  - Adnexal Torsion -ovary, fallopian tube, or both.
  - Fallopian tube cysts and abscesses/Hydrosalpinx.
  - Pelvic inflammatory diseases
  - Tubo-ovarian abscess
  - Paratubal cysts
  - Ectopic pregnancy
  - Müllerian anomalies
- NON GYNAECOLOGIC :
  - Appendicitis/ appendiceal abscess

Clinical presentation and examination of an adolescent patient

Patients usually present with pain abdomen, with or without nausea, vomiting, fever, pressure symptoms, and (less commonly) precocious puberty and vaginal bleeding [4]. Obtaining a detailed history and physical examination is important. The treating clinician should enquire about the type of pain, duration and relation to menstruation. An acute onset pain maybe associated with adnexal torsion, whereas cyclic discomfort may indicate endometriosis or Mullerian anomalies[5]. Patients with intermittent adnexal torsion can present with a history of episodic pelvic pain[6]. Sexual activity and use of contraception must be elicited. Possibility of ectopic pregnancy and PID must be kept in mind in sexually active girls. During examination, breast development, axillary or pubic hair to identify signs of precocious puberty are looked for. Large adnexal masses may be palpated on abdominal examination. In patients who are not yet sexually active, a bimanual examination via the rectum must be done, while a vaginal bimanual examination can be done in sexually active patients with their consent[7].Pregnancy test should be obtained in all sexually active post-menarche girls. Tests for Chlamydia and gonorrhea and complete hemogram when acute PID is suspected. To complete the work-up urinalysis and cultures may also be obtained.

Imaging

A pelvic ultrasound is the most essential tool in the evaluation of an adnexal mass. Transvaginal ultrasound is the modality of choice in any patient with a pelvic/adnexal mass[8]. However transabdominal ultrasonography rather than transvaginal ultrasonography is recommended for young, virginal, or prepubertal adolescents[9]. The ultrasound examination should assess the size and composition of the mass. The IOTA group has developed a Simple Rules approach to evaluate an ovarian lesion sonographically[8]. Benign 'rules' are unilocular cysts, less than 100 mm in diameter, have an acoustic shadowing, solid component less than 7mm and no vascularity. While malignant 'rules' comprise solid irregular multilocular tumors more than 100mm with ascites, at least 4 papillary structures and a 'strong' blood flow. The presence or absence of vascular flow within cystic or solid areas is mapped by the use of color Doppler or power Doppler. Increased central vascularity is associated with increased malignant potential, whereas the absence of vascularity has a high negative predictive value. MRI is sensitive (96.6%) and specific (83.7%– 94.0%) for the diagnosis of malignancy and Mullerian anomalies It may be considered when sonography is unable to characterize a mass.

Role of serum tumor marker testing in the evaluation of an adnexal mass

Serum markers are used along with imaging to assess the likelihood of malignancy. Elevated CA 125 levels in combination with other findings can be useful to distinguish between benign and malignant adnexal masses. A markedly raised CA 125 level raises malignancy risk, even though women with benign conditions such as endometriomas can have CA 125 level elevations of 1,000 units/mL or greater[9]. Serum AFP, hCG, LDH, CA-125, Ca-19-9, CEA should be performed in all adolescents as part of routine work-up. Other markers such as testosterone,

AMH, serum estradiol, Inhibin A may be done based on clinical findings.

Management

Simple cysts less than 5cm may be observed but a yearly ultrasound is recommended in cysts between 5-7cm. In cysts more than 7cm consider MRI and complex cysts warrant tumor marker evaluation and further imaging studies[8]. During management of adnexal masses in adolescents ovarian conservation and fertility preservation is of prime importance. Adnexal masses among adolescents are usually benign and functional cysts are common. Surgical intervention is indicated in suspected malignancy, torsion, persistent mass, and acute abdominal pain. The operative options range from simple cystectomy to a unilateral salpingo-oophorectomy by laparoscopy or a staging laparotomy depending on the case. It has been noted that if a gynecologist rather than a pediatric surgeon performs the surgery there are better rates of ovarian preservation[9]. In cases of malignancy presence of a gynecologic oncologist for complete staging is necessary with fertility preservation.

Torsion of adnexa is managed by untwisting of the torsion with concomitant ovarian cystectomy. Aim is to preserve the ovary. Even if intraoperatively ischaemia or necrosis is seen ovaries regain their blood flow and function within three months of untwisting, so every effort must be made to preserve the ovary. Ovarian fixation is justified only in recurrent torsion[9].

Surgical intervention for suspected endometriomas or mature ovarian teratomas is warranted if masses are large, symptomatic, or growing in size on serial imaging, or if malignancy is suspected. Whenever possible benign masses of the ovary should be removed laparoscopically. Laparoscopy is associated with quicker recovery time and lesser morbidity. Surgical spill occurs very often during laparoscopic management of a dermoid. In such an event copious irrigation is advocated and all spill is suctioned out. The chances of chemical peritonitis is less than 1%. In the presence of large masses with solid components (for example large dermoid cysts) laparotomy may be appropriate[8].

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Vaccines in Pregnancy

Vaccination during pregnancy is a vital preventive measure in routine antenatal care, serving to protect mother, fetus and infant. Pregnant women are at extremely high risk for influenza related morbidity and mortality including adverse pregnancy outcomes such as fetal growth restriction, preterm birth and fetal demise. Rubella and varicella infections during pregnancy can lead to complex congenital anomalies. Although congenital Hepatitis B does not cause malformations, vertical transmission is associated with life-long disease and long term sequelae. Hence, immunization prior to conception would be ideal for the prevention of vaccine-preventable diseases associated with congenital disease. Influenza and Tdap vaccines are specifically recommended for all pregnant women while others are recommended for postpartum administration (MMR and varicella) or depending on risk factors (Hepatitis A & B, pneumococcal and meningococcal vaccines).

In theory, inactivated vaccines should be safe for use during pregnancy but specific studies or data on use during pregnancy is limited. It is essential that future studies on vaccines in pregnancy focus on immunogenicity and safety for mother and infant. It is also needed to break the barriers to increasing adult vaccine coverage and the health consequences of vaccine preventable diseases for pregnant women and infants. All obstetricians need to be proactive in educating and administering vaccines to pregnant women.

Edmund Neale
Chair Part 3 MRCOG
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Management of the Overactive Bladder

Many women present with symptoms of urgency and urge incontinence. The majority of these will respond to lifestyle modification if well motivated and supported, whilst others will need anticholinergic medication to gain an improvement in their quality of life. Those who are refractory to these interventions will need a full urodynamic assessment to confirm the diagnosis and exclude one of the rarer causes of urgency before undergoing further treatment.

In this talk I will discuss the initial assessment, investigation and management of patients with symptoms of an overactive bladder along with their long term prognosis.

Update on the use of vaginal mesh for urinary incontinence and prolapse

The introduction of mesh to vaginal surgery some 20 years ago was seen by some, but not all, as a breakthrough in the care we offer women with prolapse or urinary incontinence. This summer in the UK, as a result of not only scientific data on long term outcomes, but also pressure from patients and in the media, the use of all vaginal mesh has been banned, reducing the options for treatment for some women.

The mesh story provides lessons for us all on the governance and processes needed to successfully and transparently introduce both new procedures, and reintroduce old procedures as women turn back to the colposuspension for treatment.

Overview of the MRCOG examination and Workplace Based Assessments

The three parts of the MRCOG examination sit within a seven year structured training program in the UK. Whilst they form an integral part of any trainee's career progression these high stakes summative assessments are supported by regular formative assessments and reviews throughout the training period. I will discuss the three parts of the exam in the context of the National Health Service, and the place of workplace based assessments to develop and assess the competencies needed of a consultant in the UK.

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Reproductive Medicine Workshop 2nd November 2018, Friday

"New medical therapies for Endometriosis"

In this talk I will outline how the world of endometriosis management is changing. Within the UK there are significant changes to the way in which the organisation of specialised endometriosis care is managed nationally. This has been championed by the British Society of Gynaecological Endoscopy, a specialised society of the RCOG. These changes will all be discussed in the context of the new NICE guideline, published in 2017.

In addition to the extensive output from the NICE guideline it is important to be aware that there have been recent developments in the medical management of endometriosis. New data will also be presented on novel therapies.

Main Scientific Session 3rd November 2018 Saturday, Key Note Address

"Delayed diagnosis of Endometriosis, why we should improve"

Endometriosis is seen by many as a destructive, painful disease that has the potential to significantly affect a woman's life through chronic pain and impairment of fertility. There is an increasing body of evidence that through early identification and prompt management the management of this chronic disease can be optimised, prior to significant pelvic organ damage. This presentation will also present how qualitative research in endometriosis could be an important factor in developing tools to aid diagnosis earlier in a woman's life.

Main Scientific Session 4th November 2018 Sunday

Guest Lecture

"Human factors and safety culture in maternity"

Safety in maternity is an issue that the RCOG have championed around the world for many years. The key RCOG project, Each Baby Counts is our flagship analysis of safety culture, environment and resources. Key findings from this project are that the way in which teams work are areas where there are many opportunities for improvement of care. In my presentation I plan to outline the key components of human factors, outline what you can do and also discuss what the RCOG is currently doing in this area.

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Working Guidelines for Interstitial Cystitis /Bladder Pain Syndrome

Interstitial Cystitis/Bladder Pain Syndrome is a heterogenous disease. Definition of IC has been hampered by the lack of specific diagnostic criteria, lack of specific histopathologic changes, unpredictable fluctuation in symptoms and the extreme variability among patients in terms of symptoms, objective findings, and treatment responses. Global Interstitial Cystitis Bladder Pain Society (GIBS) has formulated working guidelines for use by qualified caregivers.

GIBS definition of IC/BPS

Pain or discomfort in lower abdomen and / or urogenital area

- Of more than 3 months duration,
- Which is worst on full bladder
- Along with one or more lower urinary tract irritative symptoms like frequency, urgency, nocturia,
- With or without standard stigmata on cytoscopy
- Provided another discernable pathology likely to cause these symptoms has been excluded

Clinical approach to a patient with suspected IC/ BPS

Clinical evaluation of the patients should start with standard steps of History and Physical examination. High clinical index of suspicion is the key to diagnosis. It is equally important not to over diagnose this condition.

I. History

a. The description of Pain / Discomfort.

The following characteristics are essential for the clinical diagnosis of IC/BPS.

1. Pain or discomfort in lower abdomen and / or urogenital area
2. Of more than 3 months duration,
3. Which is worst on full bladder
4. Along with one or more lower urinary tract irritative symptoms like frequency, urgency, nocturia.

Addendum to above

- Pain may occur in other areas in addition to these. These may include rectum, lower back, and inner thighs.
- It is important to make the patient understand the micturition cycle as the clinician does. Extracting correct information regarding relationship of pain with different phases of urination from the patient might be a difficult task but is the sheet anchor of diagnosis.
- A leading question can be: "If you have a sudden desire to go to washroom, what is your fear? Is it that you would be afraid of leaking urine which will be embarrassing or you would get immensely uncomfortable due to increasing pain while holding on? The answer will help to quickly exclude OAB (Overactive Bladder) from IC/ BPS
- When the patient wakes up from sleep to pass urine, is it because of a sensation of full bladder (desire to pass urine) or due to pain. The patients often learn to evacuate their bladder to get rid of pain in cases of IC/ BPS.
- Pain relieved of passing stools or flatus should point towards the Intestinal tract as cause of the symptoms
- Pain intensity changing with the menstrual cycle should be viewed as originating from uterus and adenexa
- Deep Dyspareunia in women is suggestive of IC/ BPS while superficial Dyspareunia is indicative of Vulvovaginitis.

b. History of confusable diseases

One must exclude the following in History

- Prior pelvic surgery
- Urinary stone disease
- Pelvic inflammatory disease (History of Vaginal discharge)
- History of pelvic radiation
- Infertility
- Diagnosis of endometriosis
- History of neurological disease (suggestive of Neurogenic bladder)

c. History suggestive of aetiology

- History of allergies/ bronchial asthma /Seasonal hay fever / drug allergies / urticaria
- History of obstructive symptoms, in women due to pelvic floor spasm, in men due to prostatic pathology or stricture urethra
- History 'Burning character' of pain suggestive of neuropathic pain

- Recent change in diet , like health drinks, excessive tea/ green tea/ coffee/ dark chocolates or something else which the patient wasn't used to earlier. Change of diet due to geographical translocation.
- Recent drug treatment for unrelated disease

d. History of associated diseases

It is important to record the associated medical co morbidities like

- Fibromyalgia
- Migraine
- Mental stress
- Irritable Bowel syndrome

II. Examination

General examination starts as soon as the patient and caretaker enter the consulting room. This includes the amount of medical records they are carrying, the dismal look on the patient and her/his attendant.

a. General
   - Gait of the patient
   - Mental state of the patient
   - Somatic signs of anxiety like pallor, sweating etc.

b. Abdominal examination
   - Scars of previous surgeries
   - Any abdominal masses
   - Tenderness in abdomen, mainly suprapubic. Any other area of tenderness may be noted.

c. Local examination
   - Pelvic examination in a female starting from standard inspection, Per speculum, and digital pelvic examination.
   - Digital rectal examination should be done in men
   - Any area of tenderness in perineum ,
   - Tone of the pelvic floor muscle
   - Trigger points need to be noted
   - Any Myofascial bands must be looked for

d. Focused neurological examination if indicated

Recommendations for Investigations

Considering Indian Scenario, the GIBS council has proposed the following guidelines for investigating a suspected case of IC/BPS .

Table 1: Diagnostic tests for of IC/BPS (Proposed by GIBS Council)

Mandatory (Essential)	**Recommended (In selected cases)**	**Optional**
Clinical history Physical Examinations Frequency Volume chart Urinalysis Ultrasonography*	Urine culture** Urine cytology*** Symptom scores# QOL scores Frequency-volume chart Cystoscopy	Urodynamic study Bladder Biopsy

Table 2: Confusable diseases with interstitial cystitis

Bladder diseases	Overactive bladder, neurogenic bladder, benign or malignant bladder tumor, bladder calculus, radiation cystitis, chemotherapy induced cystitis (Cyclophosphamide, ketamine,tiaprophenic acid etc.)
Prostate and urethral diseases	Prostatic hypertrophy, urethral diverticulum, urethral stricture
Genitourinary infections	Bacterial cystitis, tubercular cystitis, urethritis, prostatitis*, chronic pelvic inflammatory diseases, active genital herpes, vaginal candidiasis
Gynecologic diseases	Endometriosis, uterine myoma, vaginitis, climacteric disturbance, uterine/ cervical/ vaginal cancer
Other conditions	Polyuria, pelvic floor muscle spasm, vulvodynia, vestibulodynia, pelvic congestion syndrome

Treatment guidelines for IC/BPS

- Multiple treatment options- most of them lacking high level evidence.
- Spectrum of treatment varies from conservative therapy e.g. patient education, counseling, behavioural therapy to the most invasive option i.e. cystectomy and urinary diversion in a end stage small fibrotic bladder.
- Treatment would depend upon the severity, stage and the possible aetiopathogenesis of the disesase along with clinical judgement and patient preference.
- Often a multi modal treatment approach is advised.
- Phenotyping the treatment plan for a particular patient is probably the best way to achieve maximum response.
- Ineffective therapy should be stopped after a reasonable time and diagnosis should be reconsidered if there is no benefit even after muti modal therapy,
- AVOID long-term antibiotics, oral steroids, use of long duration high-pressure hydrodistention, intravesical BCG.

Conservative

Patient education: normal bladder function, What is BPS/IC?, benefits and risks of available treatment options .

Counseling: Natural history of waxing and waning, no curable single treatment available, reasonable expectations about treatment outcome)

Bevioural therapy: Timed voiding, controlled fluid intake, pelvic floor muscles relaxation exercises, stretching exercises, hyperbaric oxygen, stress reduction techniques, managing working hours, patient support groups.

Diet manipulation: Avoiding dietary triggers, acidic beverages, tea, coffee, soda, spicy food, artificial sweetener and alcohol.

Management of chronic pain: Alleviating anxiety,

psychotherapy, antidepressants, hypnosis, biofeedback, relaxation techniques, meditation, acupuncture, analgesics.

Avoiding painful bladder flares: treating bladder infections and gastrointestinal problems. Reducing or modifying painful activities like sex and prolonged sitting

Oral medications

Amitryptiline 10-75 mg / day, Nortryptiline, Doxepin S.E: constipation, palpitation, drowsiness, dry mouth, weight gain

Hydroxyzine 25-75 mg /day useful in patients with allergies S.E.: drowsiness, confusion in elderly

Pentosan polysulfate 300mg/day, takes 3-6 months for optimum response

Side effects: nausea, diarrhea, hair loss, headache, rectal bleeding

Others: Azathioprine, Cyclosporine (3 mg/kg/day)

Cystoscopy

Cystoscopy should be done under General Anesthesia, Biopsy and hydrodistension may be done as per the merits of the case

Intravesical treatment

Intravesical drugs are administered due to poor oral bioavailability establishing high drug concentrations at the target, with few systemic side-effects. Disadvantages include the need for intermittent catheterisation, which can be painful in BPS patients, cost, and risk of infection.

Following intravesical agents have been used

1. DMSO (AUA and RCOG guidelines Gr C, Asian guidelines Gr B).
2. Heparin (AUA and Asian guidelines Gr C, RCOG guideline Gr D)
3. Lidocaine (AUA, RCOG and Asian guidelines Gr B)
4. Hyaluronic acid (RCOG Gr B and Asian guidelines Gr C)
5. Chondroitin sulfate (Asian guidelines Gr C and RCOG Guidelines Gr D)
6. Pentosan polysulfate intravesical preparation (Asian guidelines Gr C)

Intravesical resiniferatoxin and Intravesical Bacillus Calmette–Guérin are therapies that are not recommended for BPS.

In Pregnancy

Usually there is remission of symptoms during pregnancy

Intravesical heparin is considered safe option in pregnancy. Although one course of DMSO may be used prior to pregnancy for symptom remission with good pregnancy outcomes (delivery at term, normal birth weight and postnatal symptom control), DMSO is known to be teratogenic in animal studies. (RCOG Gr D)

Others: Intra vesical Botulinum toxin injections, electrical nerve stimulation, sacral neuromodulation

Surgery: Subtotal cystectomy, urinary diversion, and augmentation cystoplasty

Acknowledgements

Global Interstitial Cystitis Bladder Pain Society (GIBS) 2017 working guidelines

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Achieving Delivery in Women with Premature Ovarian Insufficiency (POI)

Introduction

Premature Ovarian Insufficiency (POI), previously referred to as "Ovarian Failure", is the depletion or dysfunction of ovarian follicles before the woman reaches the age of 40. POI is a complex and relatively poorly understood entity with a myriad of etiologies and multisystem sequelae that stem from premature deprivation of ovarian sex hormones (Torrealday S et al 2017). POI is characterized by the absence of regular menstrual cycles with raised gonadotropins and low estradiol.

Prevalence of POI

- 1% of women under the age of 40
  0.1% of women under 30
  0.01% of women under 20
- 4-31% of all cases with POI are familial
  Approximately 10-28% of all women with primary amenorrhea and 4-18% with secondary amenorrhoea and <10% with abnormal menses have POI.
- POI is either spontaneous or consequent to a recognized insult such as following surgery or chemotherapy or radiation exposure. Spontaneous POI is insidious in presentation and delay in diagnosis is common. In contrast, iatrogenic POI is almost always anticipated in advance.

POI- Causes

- Ovarian follicle depletion
  - Low initial follicle number
  - Accelerated follicle loss
- Ovarian follicle dysfunction
  - Signal defect
  - Enzyme deficiency
  - Autoimmunity

Monosomi X (Turner's syndrome) and Fragile X syndrome are the most common chromosomal anomalies in these patients.

2015 ESHRE POI Guideline development group (GDG) has recommended new diagnostic criteria

- Age<40 yrs
- Oligo/amenorrhea >4 months
- FSH > 25 IU/L (on 2 occasions at least 1 month apart)

Evaluation of POI

Objectives

- Tests to establish the diagnosis of POI
- Tests to help clarify the etiology
- Screening tests for other diseases known to have higher prevalence among women with POI

Complete history and physical examination

Initial Workup

- FSH (>25 IU/L on at least two occasions 4 weeks apart)
- Estradiol
- TSH
- Prolactin
- Ultrasound Pelvis

Once diagnosis is made

- Karyotyping (in all women with non-iatrogenic POI)
- Adrenocortical antibodies (ACA) / 21 OH antibodies
- Antithyroid antibodies
- Anti-thyroid peroxidase
- Anti-thyroglobulin
- Test for Fragile X chromosome (FMR1) Premutation
- Bone density by dual-energy x-ray absorptiometry (DEXA)
- Blood chemistry – Serum Vit-D, Calcium, Lipid profile, FBS, HbA1C, CBC, KFT
- Cardiological and Endocrinological reference

Problems in women with POI

- Ovarian function is intermittent or unpredictable in many cases.
- Upto 25% women with POI may spontaneously ovulate.
- 5-10% of women with POI experience spontaneous conception and delivery.
- Regardless of the etiology, patients with POI are estrogen deficient.
- POI women are at increased risk of having several co-morbidities including.
  cardiovascular, bone health, sexual and genitourinary, neurological and psychological health issues.
  - Early loss of ovarian function has been shown to be associated as a risk factor for CV disorders and mortality.
  - Turner syndrome (XO or mosaic XX/XO karyotype) holds unique pregnancy risks due to the high rate

of cardiac abnormalities seen in this population and pregnancy-related escalation in risk for catastrophic cardiovascular events such as aortic dissection.

- Evaluations by a perinatologist and cardiologist are essential given that any evidence of aortic root abnormalities, common in this population, is a contraindication to pregnancy.
- In women with Turner Syndrome, cardiovascular risk factors should be assessed at diagnosis and annually monitored (at least blood pressure, smoking, weight, lipid profile, fasting plasma glucose, HbA1c).

Possible Therapies for the treatment of POI

- DHEA
- Melatonin
- Ovarian rejuvenation
  - Platelet Rich Plasma (PRP) Therapy
  - Stem Cells Therapy – mesenchymal stem cells (MSCs), stem cells from extra-embryonic tissues, induced pluripotent stem cells (iPSCs), and ovarian stem cells
  - In Vitro activation (IVA)
- Oocyte Cryo Preservation for future fertility– No more considered experimental. It is an alternative option for avoiding Donor Oocyte (DO) in selected cases, however, data on success rates, the effect on continuing pregnancy, and adverse effects are still limited.
- Donor Oocyte IVF is an established option to achieve pregnancy in these women.

ESHRE – POI Guideline, 2015

- Inform women with POI that there are no interventions that have been reliably shown to increase ovarian activity and natural conception rates (Grade –A)
- Oocyte donation is an established option for fertility in women with POI (C)
- In women with established POI, the opportunity for fertility preservation is missed (GPP).

How should fitness for pregnancy be assessed in women with POI?

- Women presenting for oocyte donation who are suspected of having POI should be fully investigated prior to oocyte donation, including thyroid and adrenal function as well as karyotype.
- Gondectomy should be recommended for all women with detectable Y chromosomal material.
- Fragile-X permutation testing is indicated in POI women.
- The implications of the fragile-X permutation should be discussed before the test is performed.
- Autosomal genetic testing is not at present indicated in women with POI, unless there is evidence suggesting a specific mutation (e.g. BPES).
- Women previously exposed to anthracyclines, high dose cyclophosphamide or mediastina irradiation should have an echocardiogram prior to pregnancy, and referral to a cardiologist if indicated.
- Women with Turner Syndrome should be assessed by a cardiologist with a specialist interest in adult congenital heart disease and should have a general medical and endocrine examination.
- Women with POI should have their blood pressure, renal function, and thyroid function assessed prior to pregnancy.
- Pregnancy in some women can be of such high risk that clinicians may consider oocyte donation to be life threatening and therefore inappropriate.
- Women with POI identified with chromosomal aberrations (such as balanced translocations or Turner mosaicism) or single-gene disorders such as FMR1 premutation carrier state should undergo preconception counselling to better understand the risks to their progeny and of miscarriage in the event that successful conception is achieved; based on risk assessments, many may choose to consider use of donor eggs to maximize their chances for a healthy pregnancy.
- Depending on the length of the CGG repeats, male children of women who harbour the FMR1 premutation may be at an increased risk of being affected by fragile X mental retardation.
- Use of in vitro fertilization (IVF) with preconception genetic diagnosis can minimize transgenerational transmission of identifiable genetic mutations in families that are deemed at an increased risk of passing genetic mutations to future progeny.

Challenges during Pregnancy in POI Women

The success of pregnancy depends upon an appropriate implantation and placental function. Any insult during the process of implantation and placentation leads to obstetric complications, including spontaneous miscarriage, SGA, preterm birth, and PET. In DO pregnancies the fetus is allogeneic to the gestational carrier. Therefore, the mother has to cope with a higher degree of antigenic dissimilarity compared with spontaneously conceived pregnancies. Increased immunological activity and fibroid deposition was noted at the maternal–fetal interface in DO pregnancies.

The most common complication noted in Donor Oocyte (DO) pregnancies is pregnancy induced hypertension and pre-eclampsia, ranging from 16 to 40% of women. Pregnancies achieved by IVF or ICSI are at a higher risk for pregnancy complications compared with spontaneous pregnancies (YB Jeve et al 2016). Although obstetric complications have been attributed to advanced maternal age in these women, the risk is reported to be independent of age (Wiggins DA et al 2005). Placental pathology as a result of immunological pathogenesis is suggested to be the reason for obstetric complications

in DO pregnancy (Levron Y 2014). The study by Kim et al (2005) showed that the incidence of hypertensive disorders is significantly higher if the oocyte donor is unrelated to the recipient, compared with a related sibling donor. The risks of SGA and preterm delivery are significantly higher in DO pregnancy. A meta-analysis (Jeve YB et al 2016) showed that the chances of caesarean delivery for singletons are significantly higher with DO pregnancy.

Women undergoing DO conception should be counselled before conception about the increased risks during DO pregnancy, and that the risk is independent of age or multiple pregnancies. Obstetricians should be aware of the increased pregnancy risks in this particular group of patients, and appropriate surveillance strategies should be in place during antenatal, intrapartum, and postnatal care. The use of serial growth scans to diagnose SGA, individualised surveillance and management strategy should be considered. The use of low-dose aspirin in DO pregnancy in the absence of any other risk factors requires further evaluation (Jeve YB et al 2016).

Summary & Conclusions

- Despite the advances in our understanding of POI, the vast majority of cases remain idiopathic, and there is no clear etiology to explain the phenotype.
- Up to 25% of women with POI may spontaneously ovulate, and 5% to 10% will conceive and deliver after being diagnosed with POI.
- Despite marked advances in the field of reproductive medicine in recent years, there are no interventions that can reliably improve residual ovarian reserve parameters or any treatment other than use of donor eggs which can improve conception rates in women with POI.
- Women should be reassured that spontaneous pregnancies after idiopathic POI or most forms of chemotherapy do not show any higher obstetric or neonatal risk than in the general population.
- Pregnancies in women with Turner Syndrome are at very high risk of obstetric and non-obstetric complications and should be managed in an appropriate obstetric unit with cardiologist involvement.
- Oocyte donation pregnancies are high risk and independent of age or multiple pregnancies and should be managed in an appropriate obstetric unit.
- Appropriate surveillance strategies should be in place during antenatal, intrapartum, and postnatal care.
- The results of the meta-analysis show that the risks of developing hypertensive disorders in pregnancy, SGA and preterm delivery are significantly higher with DO pregnancy when compared with autologous IVF pregnancy.
- While awaiting the newer technologies such as, the tissue specific stem cell salvage and therapy, the Oocyte Cryopreservation for future fertility before it is too late, is an alternative option for avoiding DO in selected cases; however, data on success rates, the effect on continuing pregnancy, and adverse effects are still limited.

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Preterm Labour - Screening methods, Intervention and the New Evidence in clinical practice

There has been considerable effort in recent years to untangle the enigma of spontaneous preterm birth – and rightly so, given its extraordinary clinical, personal and economic impact. He plethora of reports can be confusing, often with conflicting evidence and highly dependent on the populations investigated, and sometimes with competing commercial and academic interests.

A number of tests predictive for preterm labor are currently being marketed. Just as the efficacy and clinical utility of interventions are dependent on the population in which they are used, the same is true for prediction tests. The purpose of prediction may vary, for example to determine delivery risk in the short term for women with threatened preterm birth or in the long term for asymptomatic high-risk women. In symptomatic women, determining immediate management options, such as administration of antenatal corticosteroids for fetal lung maturation, or selection of place of birth to ensure optimal neonatal care, is valuable. For asymptomatic women, antenatal management plans, including risk modification (by, for example, stopping smoking) and targeting of prophylactic interventions (such as cervical cerclage, pessaries or progesterone), are relevant. For both groups, there is considerable value in the reassurance provided by negative or low-risk results. Cervical length and fetal fibronectin level can be used in both asymptomatic and symptomatic women, while the Actim Partus and PartoSure tests are reliable only in symptomatic women. With increasing evidence in support of various interventions in asymptomatic women, it may be inappropriate to adopt one test to the exclusion of another because of evidence based on one particular clinical use.

Traditionally, preterm prediction tests have been marketed to have high rule-out capabilities in symptomatic women, in order to avoid unnecessary intervention. This strategy has clinical utility given the low prevalence of preterm birth within 7 days (often < 5%). Avoiding both unwarranted antenatal bed occupancy (including blocking neonatal cots) and babies receiving unnecessary or poorly timed antenatal steroids is highly desirable. Recent evidence suggests that timing is more critical than previously thought, and the best outcomes occur if steroids are administered to the mother within 48 h prior to delivery. Clinicians are often reluctant to give a second course through fears of fetal growth restriction; this results in most preterm neonates, <35 weeks' gestation, not receiving antenatal steroids within 7 days of delivery (beyond which there is little evidence of benefit.) This is because most women who receive steroids do not deliver within a week. Withholding steroids in women initially, unless risks are very high, is likely to increase the chance that the baby will receive a dose closer to birth, which in turn will reduce adverse outcomes such as mortality and neonatal intracerebral hemorrhage. A good rule-out test gives clinicians the confidence to do this. Overall, this strategy may result in more babies receiving optimal treatment.

Interventions in asymptomatic women also have varying efficacy according to the population in which they are studied. A number of conflicting studies have been published in recent years evaluating the benefit of the vaginal pessary to prevent preterm birth. This flexible silicone ring, which is inserted in early pregnancy, can also be removed easily near term, making it an attractive alternative to cerclage. It can be associated with profuse vaginal discharge, which has caused confusion over whether membranes have ruptured, but otherwise appears to be innocuous. Studies in both twins and singletons have been conflicting.

There are international groups planning an individual patient data analysis to help resolve this controversy. Perhaps one of the key questions is how does pessary compare with cerclage and progesterone, and should they be used in combination? Twin pregnancy and etiological factors/risk status may also influence efficacy. It will take considerably more evidence to refine the indications for these interventions.

A key question is whether all pregnant women should be screened routinely and those with a short cervix (usually <25 mm) treated. This practice has been advocated for progesterone, although the cost implications and efficacy probably do not justify this.

The subtleties of differing efficacy in both prediction and prevention of preterm birth, related to populations and agents used, will continue to evolve. Combining tests, particularly cervical length with biochemical markers, could improve clinical utility. Prevention is the ideal aim, and markers that can direct prophylactic therapies are needed. The evidence base for these interventions will be discussed in the lecture.

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Demystifying the Placenta

The aim of this lecture is to examine the placental lesions associated with intrauterine growth restriction and stillbirth. The placenta may act as the "black box" of pregnancy and its examination may give insight into maternal and fetal conditions leading to intrauterine compromise and/or stillbirth. To recognise the importance of the "small" placenta and to outline what clinical tests may be appropriate based on placental findings.

The placental changes may explain the adverse events, increase our understanding of stillbirth and compromise and inform care of the next pregnancy.

IUGR

- Not recognised before the early 60s
  - Any newborn <2500g was assumed to be "premature"
- Lubchenko et al, 1963 demonstrated some neonates do not fulfil their expected growth potential
  - Birthweight <10th centile increased mortality dramatically
- An infant with a weight of 1250 g at 38–40 weeks' gestation has a greater perinatal mortality risk than one born of similar weight at 32 weeks
  - Timely diagnosis of IUGR and appropriate intervention is one of the main achievements of modern obstetrics

Universal Definition

- Birth weight < 10th centile
  - Relies on accurate assessment of gestation (esp. if IUD or if fetus macerated)
  - Accurate recording of birth weight
  - Accurate assessment of the centile

What is Growth Restriction?

- Controversial
  - The importance lies in recognising the "truly" growth restricted infant i.e. one that did not reach its growth potential.
  - IUGR often goes "hand in hand" with preterm delivery
  - Associated with maternal risk factors
- Primigravida
- PIH. Pre-eclampsia
- Malnutrition

Assessment

- Perinatal Institute (Gardosi)
  - Customized standards for fetal growth and birthweight thought by some to improve the detection of IUGR by better distinction between physiological and pathological smallness based on maternal characteristics
- Intergrowth 21 charts
  - New "prescriptive" standards describing normal fetal growth, preterm growth and newborn nutritional status in eight geographically diverse populations, and relate these standards to neonatal health risk

Causes of IUGR

- Constitutional
- Chromosomal and multifactorial developmental anomalies
  - 20% (*Snijders RJM et al, 1993)*
- Trisomy 13,18 and 21
- Other deletions and ring chromosomes
- Placental pathology
  - Maternal vascular malperfusion (MVM) and infarction
  - Fetal vascular malperfusion (FVM) / Stem vessel Occlusion/Fetal thrombotic vasculopathy(FTV)
  - Chronic villitis

Risk Factors associated with Fetal Intrauterine Growth Restriction

Fetal	Placental	Maternal
Chromosomal abnormalities	Small placenta	Extremes of under and/or malnutrition
Multifactorial congenital malformations	Circumvallate placenta	Vascular/renal disease
Multiple gestations	Chorioangiomata	Congenital or acquired thrombophilic disorder ??Autoimmune disease
Infection		Drugs/lifestyle
		High altitude or significant hypoxic disorder

Infection

- Commonest cause before 20 weeks gestation
  - Primary CMV
  - Rubella and parvovirus
- Bacterial infection may cause long term sequelae but less frequently IUGR

Placental Compromise

- Small placenta
  - Centile curves
  - Population based
  - Expressed as a percentage of birth weight
- Maternal
  - Pregnancy Induced Hypertension (PIH)
  - Pre-eclampsia (PET)
  - Thrombophilia
- Fetal
  - Fetal Thrombotic Vasculopathy (FTV)

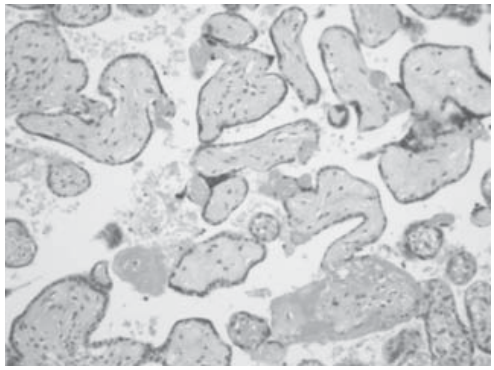
Oligohydramnios - Diminished liquor volume

- Diagnostic dilemma may be a non-specific marker of placental compromise.
- Acquired or congenital
  - Placental failure – Significant Ischemia or Infarction
  - Premature rupture of membranes – acute chorioamnionitis.
  - Renal agenesis
  - Renal anomalies – posterior urethral valves.

Infection – Acute chorioamnionitis

- Severe chorioamnionitis may be associated with IUGR and thrombi when there if a fetal response

Fetal Thrombotic Vasculopathy



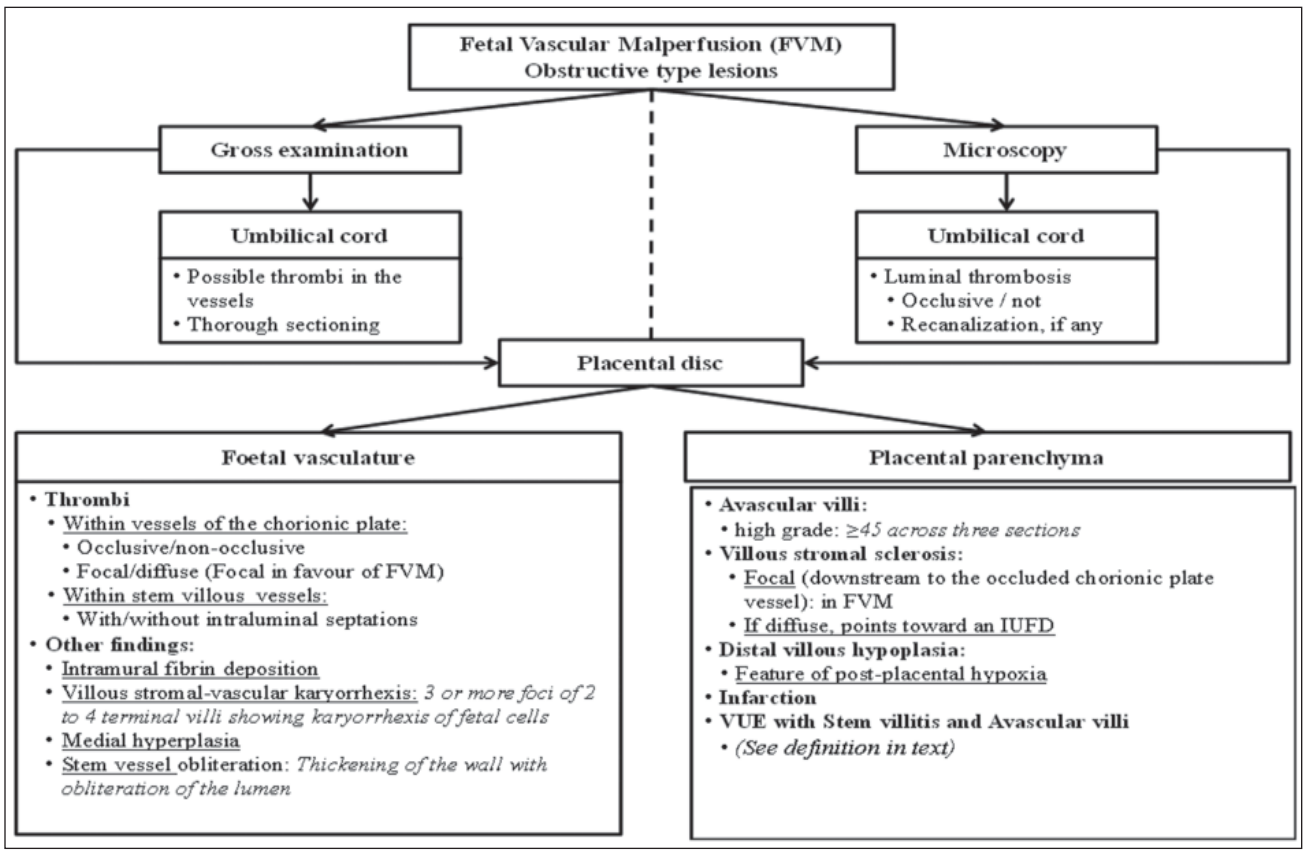
Synonyms:

- Stem Vessel Occlusion
- Fetal Vascular Malperfusion
- Fetal Thrombotic Vasculopathy

May be associated with:

- IUGR
- Pre-eclampsia
- Intrauterine fetal death (IUFD)
- Seizures and poor neurological outcome
- Amputation necrosis

NB: Caution must be taken in cases of stillbirth as loss of the entire circulation will cause a similar but diffuse change



Thrombi – Causes

- Compromise to blood flow through the umbilical cord. Maternal or fetal thrombophilias
- Maternal diabetes
- Severe chorioamnionitis
- Vascular anomalies associated with trauma

Thrombi and the Umbilical Cord

Thrombi may develop when blood flow through the cord is compromised

- Excessively long cords
- Hypercoiling
- Cord entanglement and velamentous insertion

Abnormal Cord Coiling

The umbilical cord is twisted or coiled in a clockwise direction

The average rate of coiling is 0.21/cm

- Hypocoiled cords represent about 7.5% of cords
- Noncoiled cords 4 to 5% and
- Hypercoiled cords 20%

Hypo and hypercoiling of the cords are both associated with adverse outcome including an increase in perinatal mortality, IUGR and fetal distress. The coiling is thought to reflect early intrauterine activity – and lack of coiling may be due to fetal inactivity due to CNS malformation and/or physical constraint of movement

Arterial Thrombi

- Most likely to be due to abnormal coagulative states of the mother or fetus

Significant investigations

Thrombosis may explain adverse outcome

- Findings should be discussed with the clinicians and correlated to clinical history including underlying coagulopathy, diabetes or cord lesions

Coagulopathies include:

- Factor V Leiden
- Activated protein C resistance
- Protein S deficiency
- Protein C deficiency
- Lupus anticoagulant
- Antiphospholipid antibodies
- Umbilical Cord Factors

Diabetic placenta

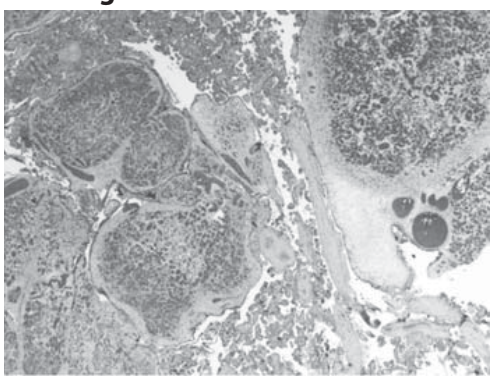
Classic diabetic placenta:

- Bulky and oedematous
- Villi are large and immature with persistence of central vessels and poor formation of vasculosyncytial membranes

Fetal and placental vascular thrombosis is more common in the infants of diabetic mothers

- Reflected in fetal renal or adrenal thrombosis
- Slight increase in single umbilical artery
- Associated with sacral agenesis (caudal regression syndrome)
- Infarcts are UNCOMMON in diabetes unless the condition is complicated by maternal **nephropathy**
- In this situation we may see IUGR and placental infarction

Other vascular lesions associated with IUGR – Chorangiomatosis



- Non expansile vascular proliferation similar to chorangioma but occurring in otherwise normal stem villi
- Villous capillary lesion occurring due to reactive hyperplasia to hypoxia
- Overall prevalence is 0.55% (less common than chorangiosis)
- Heterogeneous and less well defined lesion with features intermediate between chorangioma and chorangiosis
- Chorangiomatosis has been associated with negative fetal outcomes such as IUGR preterm delivery (<32 weeks gestation) and preeclampsia.
- No definite association with maternal diabetes mellitus (unlike chorangiosis)
- Divided into 3 subtypes
  - localized (focal)
  - segmental
  - multifocal / diffuse types
    - Associated with extreme prematurity (< 32 weeks), congenital malformations, intrauterine growth restriction, delayed villous maturation, avascular villi and placentomegaly
- Pathophysiology
  - Capillary hyperplasia occurs as a reaction to tissue hypoxia that stimulates neoangiogenesis by activating growth factors such as VEGF and PDGF
- Etiology
  - Chorangioma and localized chorangiomatosis are

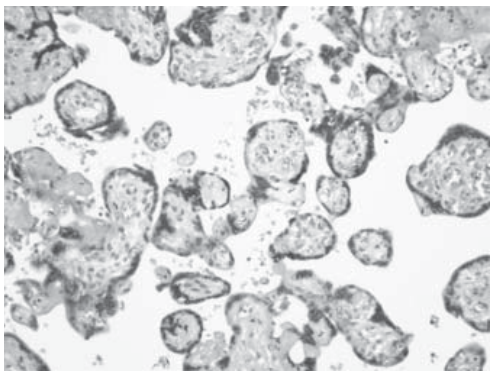
etiologically similar hyperplastic lesions arising in subtrophoblastic reticular connective tissue of stem villi

- Chorangioma and chorangiomatosis often coexist

Maternal Vascular Malperfusion

Synonyms:

- Ischaemia



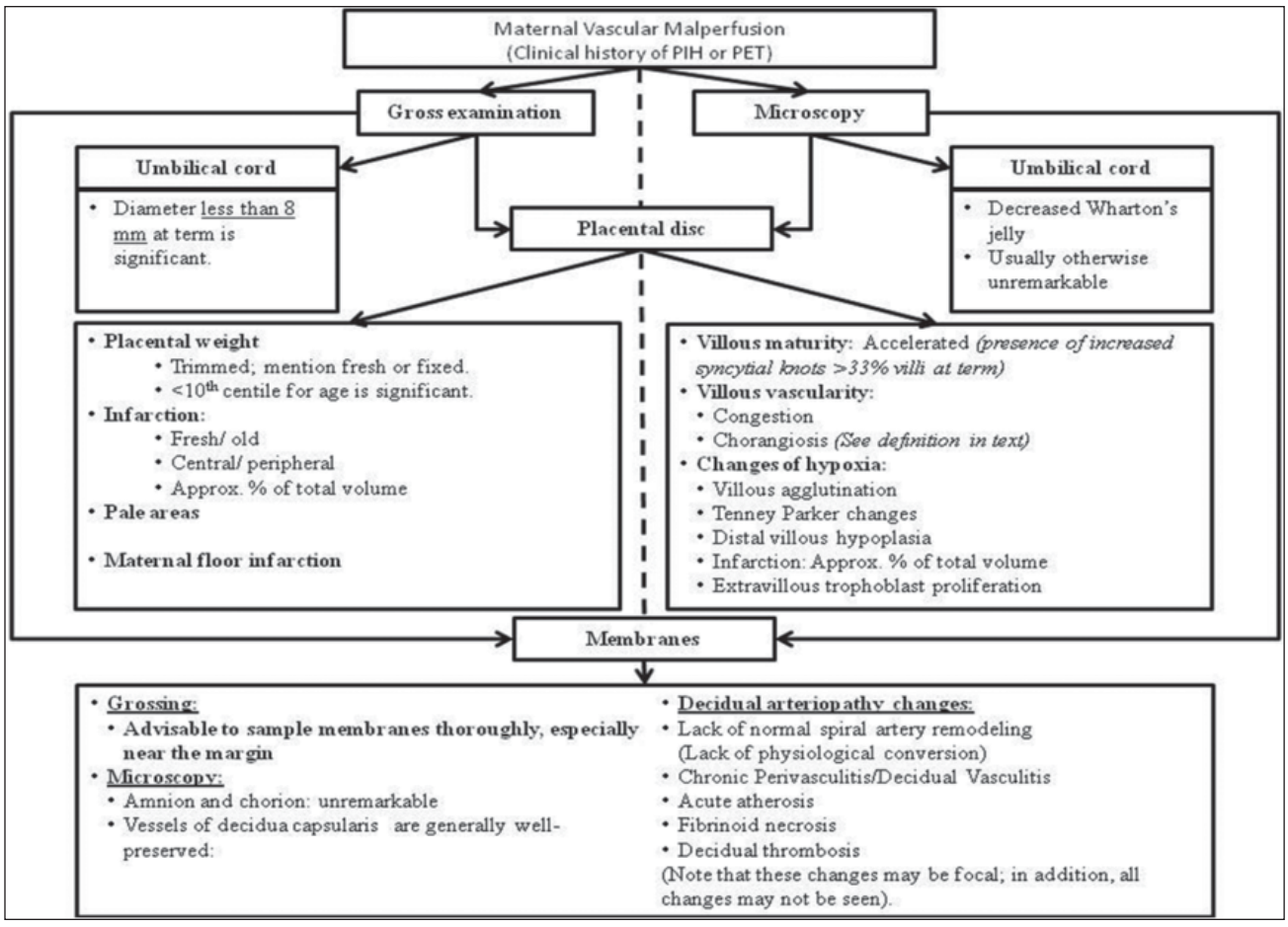
Placental infarction

May be physiological at term!

- Small marginal infarcts are fairly common at term and are not usually associated with adverse outcome
- Multiple foci of infarction however may be related to underlying maternal disease and are more likely to be of significance
- Significance of ischemic areas at term requires full knowledge of clinical information such as IUGR or adverse outcome
- Minor areas of infarction are likely to be of significance in the preterm placenta
- Infarction

Maternal diseases associated with infarction:

- Pregnancy Induced Hypertesion
- Pre-eclampsia
- Systemic Lupus
- Inherited thrombophilias:
- Activated protein C resistance (most common defect is a point mutation in Factor V (Factor V Leiden mutation)
- Prothrombin mutation
- Deficiency of Antithrombin III
- Protein C deficiency
- And hyperhomocysteinemia (homozygous deficiency of Methylene tetrahydrofolate reductase (MTHR)
- NB These inherited thrombophilias may also result in Fetal thrombotic Vasculopathy
- Infarction

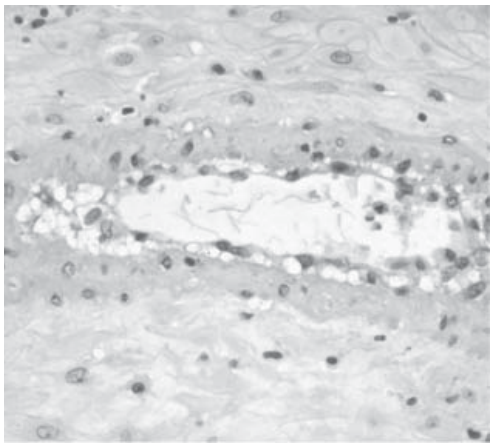


The "Small" placenta

- May be associated with stillbirth 38 weeks + where the baby does not show evidence of IUGR
- Placenta weight <10th centile for gestation with Placenta weight: Birthweight ratio<10th centile
- Poor outcome and death in some cases due to diminished placental reserve
- As placenta ages physiological changes occur which decrease the functional reserve of the placenta
- May present as RFM – controversial and requires more research

Immunovascular disease - Pre–Eclamptic Toxaemia

- The condition and integrity of maternal blood vessels also determine fetal outcome
- Pre-eclampsia, lupus are well known to be associated with fetal loss

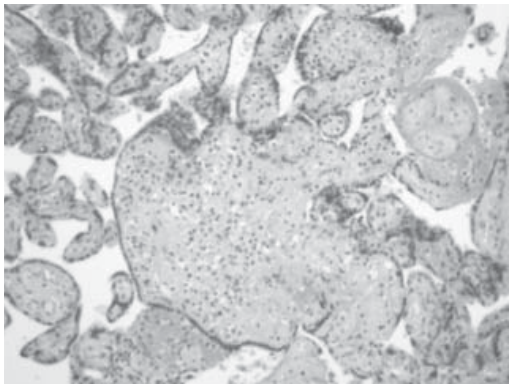


Autoimmune Disease?

- Now recognised that maternal immune responses may also be responsible for early losses and IUGR
  - Villitis Unknown Etiology
  - Histiocytic intervillositis
  - Massive perivillous fibrin deposition

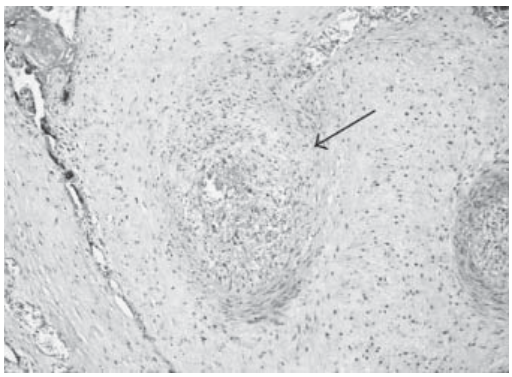
Villitis of Unknown Etiology

- Common lesion, affecting 5% to 15% of all placentas
- When low-grade lesions affecting less than 10 villi per focus are excluded, VUE is an important cause of intrauterine growth restriction and recurrent reproductive loss.
- Involvement of large fetal vessels in the placenta (obliterative fetal vasculopathy) in cases of VUE is a strong risk factor for neonatal encephalopathy and cerebral palsy.
- Although the aetiology of the eliciting antigen is unknown, many other characteristics of the immune response have been clarified. VUE is caused by maternal T lymphocytes, predominantly CD8-positive, that inappropriately gain access to the villous stroma.
- Haemorrhagic endovasculitis, also associated with IUGR tends to occur in the same placenta



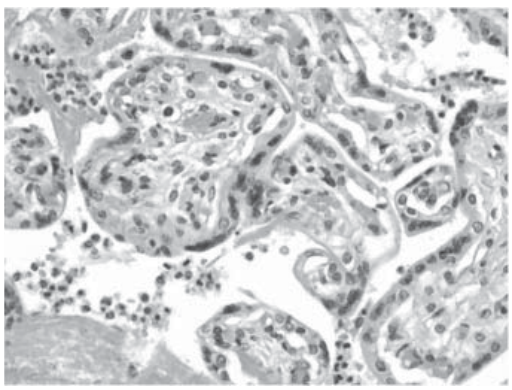
Hemorrhagic endovasculitis

- (HEV) is a controversial vasodisruptive alteration affecting fetal-placental blood vessels of all calibre is found in association with stillbirth and abnormalites of growth and development in live births
- Veno-occlusive and resembles the microangiopathy seen with Haemolytic uraemic syndrome
- Endothelial injury and vessel necrosis leads to fragmentation of RBCs and extravasation of fragments to the villous stroma. Associated with thrombi.



Histiocytic Intervillositis

- Diffuse histiocytic infiltration of the intervillous space without villitis
- Severe intrauterine growth restriction was seen in 5 of 8 second- and third-trimester placentas with CHIV



Massive Perivillous Fibrin Deposition

- Massive perivillous fibrin deposition (MFD) and its related entity maternal floor infarction (MFI) are rare placental lesions
- Their cause and pathogenesis are unknown and the histological criteria for diagnosis are poorly defined
- Evidence supports involvement of maternal alloimmune or autoimmune mechanisms

Conclusion

- Clinically relevant information is obtained in a large percentage of placentae
- Placental pathologist unique position of diagnosing disease within mother, fetus or newborn
- Able to ascertain infection, acute catastrophic event or chronic disease
- When the outcome of pregnancy is adverse placental pathology may be useful when determining the outcome of litigation
- Need for consistency in sampling and reporting lesions

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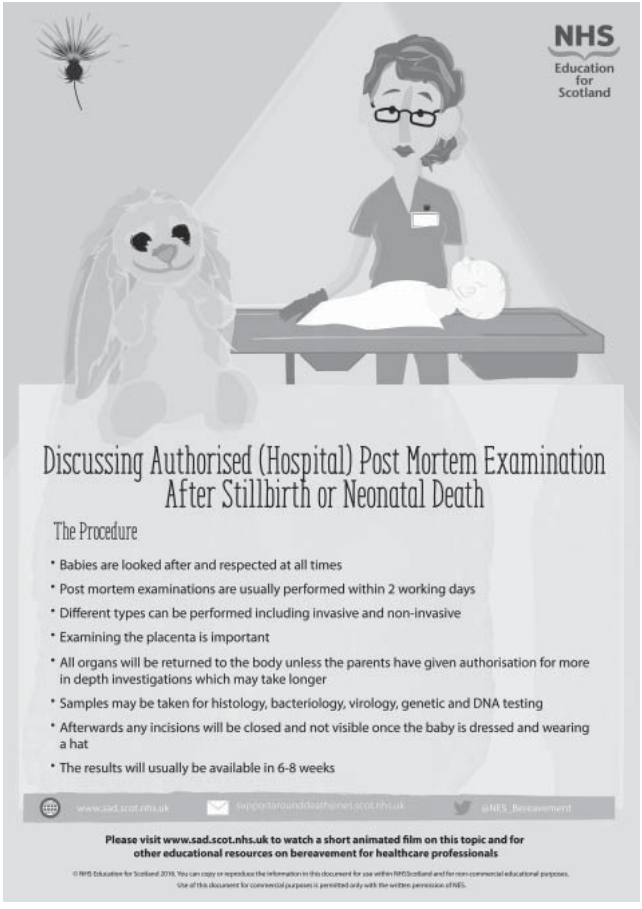
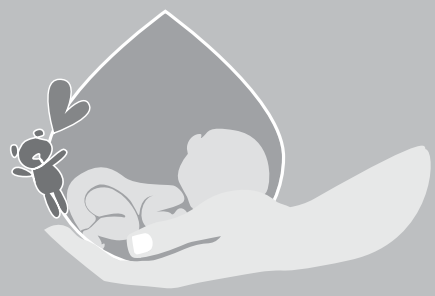


Parent to Parent – Post-mortem Authorisation Video
https://vimeo.com/272820256



This animation is designed for Parents to help them make an informed choice regarding a post-mortem.
It has been created by perinatal pathologist Dr. Margaret Evans and bereaved parents together with Sands Lothians, a charity providing compassionate support to families.

Dr Margaret-Jane Evans
Consultant Paediatric and Perinatal
Pathologist, Royal Infirmary of Edinburgh, UK

Key Messages - 2017 Perinatal Confidential Enquiry

I would like to thank all MBRRACE-UK Collaborators

Aims: The aim of the MBBRACE-UK confidential enquiries is to:

- Assess quality and safety of maternity and infant services
- Support improvements in service quality through national learning
- Produce evidence-based recommendations and good practice points
- Influence clinical practice, service provision, health policy and clinical education

Questions to be answered

- To what extent are current guidelines followed in cases of term IP stillbirth and IP related NND?
- Would improvements in care have resulted in the SB or death being prevented?
- Are there any lessons top be learned to prevent IP SB and IP related NND in the future?
- To what extent were markers of good care present in cases of IP SB and IP related NND?

Development of the 2016/17 enquiry

Aim to identify the main risks for IPSB and related NND and to outline parameters for CE:

- Adherence to clinical guidelines
- Standards of obstetric neonatal and midwifery care
- Quality of intrapartum care provision
- Role of bereavement teams - midwives/community /NICUU
- Role of placental pathology review

Points on care pathway for evaluation at the confidential enquiry panel meetings

- Antenatal care
- Care during labour
- Care at birth
- Resuscitation care
- Neonatal care
- Postnatal and bereavement care
- Follow up visit and review of care
- Post-mortem/placental histology

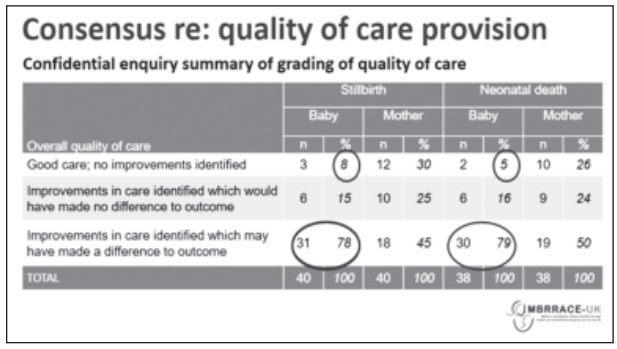
Context to findings of enquiry

Increasing numbers of pregnant women with risk factors who require more complex package of care and interventions

- Increasing maternal age
  - o 1970s largest %age births 25 – 29 years
  - o 2000s largest %age births 30 – 34 years
  - o Average age of primips 30.2 years in 2014
  - o >20% mother aged 35+ years in 2014
- Increasing BMI
  - o 10% mothers obese in 1990
  - o 15% mothers obese in early 2000s
- Varied population
  - o 11.6% mothers born outside the UK in 1990
  - o 27% mothers born outside the UK in 2014

Findings

- Mortality rate more than halved since 1993
  - o From 0.62 to 0.28 per 1000 total births
  - o Reduction of 220 IP deaths per year
- 1 in 20 stillbirths and deaths of babies within 4 weeks of birth is labour related
- In 80% of cases different care may have prevented the baby's death
- In 1 in 4 deaths there were problems with adequate staffing and resources



Antenatal Care

Antenatal Care – Key Issues:

Consensus re: quality of care along each point of the care pathway - 1

Confidential enquiry poorest grading of quality of care by point on the care pathway affecting the outcome for the baby

		Point on the care pathway									
		Antenatal		Care in labour		Care at birth		Resuscitation		Neonatal care	
Quality of care issues		n	%	n	%	n	%	n	%	n	%
Intrapartum stillbirths											
	None	13	32.5	9	22.5	23	57.5	21	70.0	N/A	
	Minor	2	5.0	0	-	0	-	3	10.0	N/A	
	Significant	6	15.0	5	12.5	5	12.5	5	16.7	N/A	
	Major	19	47.5	26	65.0	12	30.0	1	3.3	N/A	
	TOTAL	40	100	40	100	40	100	30*	100	N/A	
Intrapartum-related neonatal deaths											
	None	19	50.0	8	21.0	30	78.9	20	52.6	20	69.0
	Minor	4	10.5	0	-	0	-	5	13.2	3	10.3
	Significant	8	21.0	4	10.5	2	5.3	6	15.8	2	6.9
	Major	7	18.4	26	68.4	6	15.8	7	18.4	4	13.8
	TOTAL	38	100	38	100	38	100	38	100	29*	100

*Denominator reflects applicable deaths at this point in the care pathway

MBRRACE-UK

Overall: major significant sub optimal AN care 51.3% cf 44.9% in 1994/5

Antenatal Care – Key Issues

- Screening for fetal growth disorders not performed according to National Guidelines
- 33% of women with reduced fetal movements: management did not follow national guidelines
- Diabetes not managed in joint clinic in 50% of cases
- 80% of women with previous CS had documented counselling or management plan for labour

Antenatal Care – Implications

- Awareness of risk factors for stillbirth in antenatal period and reappraise risk at each contact
- Antenatal factors must be considered when reviewing IP related NND
- Consider how national evidence based guidance is implemented locally
- Disseminate good practice through MDTs
- 60% of women not screened for smoking in pregnancy according to the guidelines

Care in Labour

Consensus re: quality of care along each point of the care pathway - 1

Confidential enquiry poorest grading of quality of care by point on the care pathway affecting the outcome for the baby

		Point on the care pathway									
		Antenatal		Care in labour		Care at birth		Resuscitation		Neonatal care	
Quality of care issues		n	%	n	%	n	%	n	%	n	%
Intrapartum stillbirths											
	None	13	32.5	9	22.5	23	57.5	21	70.0	N/A	
	Minor	2	5.0	0	-	0	-	3	10.0	N/A	
	Significant	6	15.0	5	12.5	5	12.5	5	16.7	N/A	
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Intrapartum-related neonatal deaths											
	None	19	50.0	8	21.0	30	78.9	20	52.6	20	69.0
	Minor	4	10.5	0	-	0	-	5	13.2	3	10.3
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	Major	7	18.4	26	68.4	6	15.8	7	18.4	4	13.8
	TOTAL	38	100	38	100	38	100	38	100	29*	100

*Denominator reflects applicable deaths at this point in the care pathway

MBRRACE-UK

Overall: major significant sub optimal IP care 78.2% cf 75.6% in 1994/5

Care in Labour - Key Findings

- Place of birth
- Place of birth and risk assessment
- Capacity and equipment
- Latent phase and transition to active labour
- Timely diagnosis difficult
- Delayed recognition affected outcome in 5 cases
- No national guidance for latent phase
- Induction of labour
- Prolonger ROM commonest indications
- Wide variation
- Delays in 1/3rd of cases
- Fetal monitoring
- Delays in initiating or continuing fetal monitoring
- Incorrect classification of CTG
- Failure to escalate or expedited birth
- Failure to recognise abruption
- Diagnosis of IUFD
- NICE and RCOG advise using real time ultrasound
- Doctors may be unsure about making a diagnosis on scan of IUFD
- Communication, leadership and supervision

Care in Labour – Implications:

- Need to promote "situational" awareness
- Helicopter view and management of whole labour ward
- Taking into account the whole picture
- "Human Factors"
- Training clinicians about factors which influence or delay appropriate decision making.
- Ability to delegate where necessary
- Training and monitoring of competency in assessing CTG change

Care at Birth and Resuscitation

Consensus re: quality of care along each point of the care pathway - 1

Confidential enquiry poorest grading of quality of care by point on the care pathway affecting the outcome for the baby

		Point on the care pathway									
		Antenatal		Care in labour		Care at birth		Resuscitation		Neonatal care	
Quality of care issues		n	%	n	%	n	%	n	%	n	%
Intrapartum stillbirths											
	None	13	32.5	9	22.5	23	57.5	21	70.0	N/A	
	Minor	2	5.0	0	-	0	-	3	10.0	N/A	
	Significant	6	15.0	5	12.5	5	12.5	5	16.7	N/A	
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MBRRACE-UK

Consensus re: quality of care along each point of the care pathway - 1

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	Point on the care pathway									
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Intrapartum stillbirths										
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TOTAL	38	100	38	100	38	100	38	100	29*	100

*Denominator reflects applicable deaths at this point in the care pathway

MBRRACE-UK

Care at Birth and Resuscitation – Key Findings

- There is a standardised approach to neonatal resuscitation throughout the UK (Neonatal Life Support (NLS)
- Up to 10% of babies needed some resuscitation
- Resuscitation of severely asphyxiated newborns is a rare event for most doctors
- Sup-optimal care in 31 (47%)
- Highest level of sub-optimal care in 10 (15%)
- NLS – focuses first and foremost on lung aeration using straight forward techniques
- Preparation
- Not summoning the "neonatal team" to a delivery where severe asphyxia should have been expected
- Delayed in intubating secondary to lack of senior support
- Failure to seek additional help
- Management of a newborn needing resuscitation outside hospital
- Use of volume/blood
- Record keeping

Care at Birth and Resuscitation – Implications

- Local Plans should anticipate the management of rare events and take into account local circumstances covering in particular:
  - o Use of intubation
  - o Diagnosis of death
  - o Decisions regarding when to stop resuscitation
  - o Access to senior support
  - o Information around transfer of infant

Post-mortem and bereavement – Key Findings

- 92.5% of stillbirth had some form of examination
- 71% of NND had some form of examination

Post-mortem and bereavement – Implications

- Need for improved communication between obstetric staff and pathologists
- Need for stillbirth and neonatal death post-mortems and placenta examinations to be carried out be specialists
- Need to hold MDT (including the pathologists)to ensure that all the clinical facts are addressed and correlated with the PM findings
- If no consent for Post mortem strongly recommend that the placenta is sent for pathology

SUMMARY - Key findings

- Intrapartum events may have origin in the antenatal period
  - o Prior fetal compromise/vulnerability
  - o Placenta not always sent for detailed examination in all cases of SB and NND.
- Findings in keeping with previous data
  - o confidential enquiry
  - o risk factors
- Relevant national guidelines exist
- Why is care not always provided in accordance with the national guidelines?
  - o Awareness of the national guidelines
  - o Local guidelines may not be as good as agreed national guidelines
  - o Time or funding constraints
- There were many examples of excellent care

Summary – Key Findings for quality improvement to reduce IP Stillbirths

- Antenatal period - Improved recognition of antenatal risk factors and reassessment of risk factors as pregnancy progresses
  - Monitoring growth in pregnancy
  - Management of reduced fetal movements
  - Care of Diabetic women in combined clinics
  - Documentation of discussion and agreed management plan for labour post CS
  - Offer of CO breath testing at booking and referral to smoking cessation services
- Concerns identified re staffing and capacity issues.
- In Labour
  - Events prior to established labour can influence outcome
  - Delays in all stages of induction pathway risk being delayed as induction rate rises
  - Women with labour induced need regular structured senior review
  - Intermittent auscultation during the first and second stage of labour
  - Real time US should there be difficulty in detecting FHR - consider review and training

- Concerns identified re staffing and capacity issues.
- Highlighted "situational" awareness
- CTG interpretation
- Recognition of situations where baby may be born with significant compromise

Summary – Key Findings for quality improvement to reduce IP related NND

- Issues around neonatal resuscitation
  - o Training in NLS
  - o Developing local guidelines for calling senior support
  - o Developing local guidelines for transfer of asphyxiated newborns
  - o Ensuring appropriate personnel at delivery

SUMMARY – Quality Improvement

- Staffing and capacity
- Situational Awareness
- National Development of a risk assessment tool to determine women's risk status on admission in labour, prior to induction and during labour
- National Guidelines developed for care during the latent phase of labour taking into account risk status
- National discussion about fetal monitoring (IA and CEFL) and agreement over training, assessment of competency and keeping up to date. "*Fresh eyes*"
- Local Guidance about actions to be taken if "asphyxia" suspected
- Local Guidance on resuscitation and improved NLS training

Challenge

How to translate these key messages into actions to decrease the rate of stillbirth?

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Adolescent Dysmorphic Features: What a gynaecologist should know?

Adolescents with dysmorphic features usually present to gynaecologists with the common complaints of primary or secondary amenorrhea.

A detailed systemic and endocrinological evaluation is warranted in such cases for correct diagnosis and to chart the course of treatment.

Some of the common cases we will be discussing are:

Turner Syndrome

Turner syndrome (TS), also known as 45,X or 45,X0, is a condition in which a female is partly or completely absence of an X chromosome. Signs and symptoms vary among those affected. Often, a short and webbed neck, low-set ears, low hairline at the back of the neck, short stature, and swollen hands and feet are seen at birth. Other dysmorphic features seen are short stature, short neck, increased Upper: lower body ratio, cubitus valgus, short metacarpal, scoliosis, Madelung deformity, micrognathia/ high palate, nail dysplasia, strabismus, ptosis, multiple nevi. The growth retardation begins in utero.

Variable but incomplete puberty, primary amenorrhea, high levels of gonadotropin by adolescence due to primary ovarian failure, girls may show mild sexual maturity.

Typically, they develop menstrual periods and breasts only with hormone treatment, and are unable to have children without reproductive technology.

Long term estrogen replacement therapy is required.

CAIS / PAIS

Is a condition that results in the partial inability of the cell to respond to androgens. It is an X linked recessive condition.

PAIS is one of three types of androgen insensitivity syndrome, which is divided into three categories that are differentiated by the degree of genital masculinization: complete androgen insensitivity syndrome

- (CAIS) is indicated when the external genitalia is that of a normal female,
- Mild androgen insensitivity syndrome (MAIS) is indicate when the external genitalia is that of a normal male, and
- partial androgen insensitivity syndrome (PAIS) is indicated when the external genitalia is partially, but not fully masculinized.

PAIS has 1-6 grades, Grade 4 presents with a gender ambiguous phenotype, including a phallic structure that is intermediate between a clitoris and a penis. The urethra typically opens into a common channel with the vagina (i.e. urogenital sinus). Grade 5, the form of PAIS with the greatest degree of androgen insensitivity, presents with a mostly female phenotype, including separate urethral and vaginal orifices, but also shows signs of slight masculinization including mild clitoromegaly and / or partial labial fusion.

These patients may present with absence of secondary sexual characters and primary amenorrhea to a gynaecologist, and requires a high index of suspicion for further evaluation.

Areas of management include sex assignment, genitoplasty, gonadectomy in relation to tumor risk, hormone replacement therapy, and genetic and psychological counseling.

Noonans syndrome

Noonan syndrome is a genetic disorder that is typically evident at birth (congenital). The disorder is characterized by a wide spectrum of symptoms and physical features that vary greatly in range and severity. In many affected individuals, associated abnormalities include a distinctive facial appearance; a broad or webbed neck; a low posterior hairline; a typical chest deformity and short stature.

In females with the disorder, the acquisition of secondary sexual characteristics (e.g., the appearance of pubic hair, breast development, and menstruation) may be mildly delayed but is more often normal. Most females with Noonan syndrome have normal fertility.

These girls needed to be thoroughly evaluated and managed with hormonal therapy for delayed puberty.

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Hysteroscopic Sterilisation: Current developments

Advent of outpatient 'office gynaecology' services has shown way to renewed popularity in hysteroscopic methods of sterilisation. There is a reported reduction in postoperative pain, shorter recovery time and appears more suitable for whom general anaesthesia or abdominal surgery is inadvisable.[1]

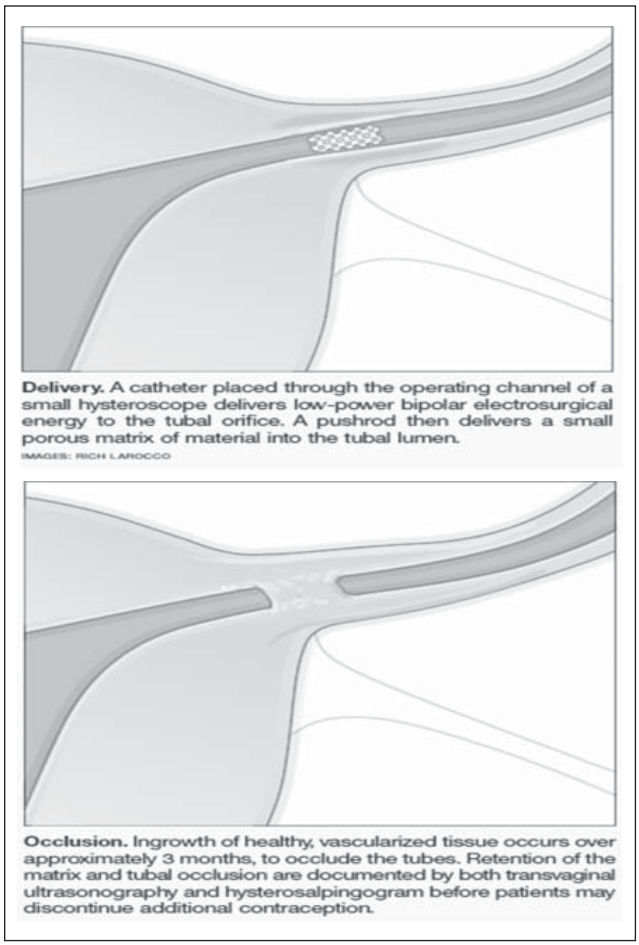
Female sterilisation is the permanent contraceptive method of choice for around 180 million couples worldwide,[2] and in the UK 49 000 women will undergo sterilisation each year.[3] Tubal sterilisation is the commonest contraception performed. Failure rate is 0.85–1.85% and the overall complication rate is 4.5/1000 procedures.[4]

In 1928, chemical occlusion was done. Quinacrine was first introduced in Germany. The method has been abandoned by the World Health Organization (WHO) over the fear of potential carcinogenicity.[1]

In 1991, Brumstead and colleagues introduced Nd:YAG (neodymium-doped yttrium aluminium garnet) laser treatment for tubal sterilisation, involving, passing a long flexible quartz fibre to cause thermal damage and tubal occlusion. The procedure became unpopular because of a high tubal patency rate of 74%.[1]

1970s onwards, Mechanical transcervical sterilisation have been trialled.[1] In 1998, Ovabloc intratubal device (Advanced Medical Grade Silicones BV, Reeuwijk, the Netherlands) was introduced involving injection of silastic material into the fallopian tube, which solidified within 5 minutes. Ovabloc was removed from the market in 2009 because of high failure rates and difficulty with maintaining cold storage with silicone.[5]

in 2009, Adiana was approved for use as hysteroscopic sterilisation.[6] it had an efficacy rate of nearly 99% at 24 to 36 months.[7] The procedure involved the 60-second application of radiofrequency energy to induce acute thermal damage to the epithelial layer of the fallopian tube followed by insertion of a silicone matrix via a delivery catheter. Initial acute thermal injury caused by the radiofrequency energy in combination with mechanical occlusion with the silicone matrix leads to fibrosis and tissue ingrowth, leading to tubal occlusion. This procedure required glycine or non-ionic distension media. (Figure 1). HSG was done after 3 months to confirm tubal occlusion. (Figure 2). Adiana was removed from the market in 2012 because of its high failure rates and inability to keep up with legal costs over patent infringement litigation. Evaluation of the Adiana system for Transcervical Sterilisation (EASE) trial, showed bilateral placement was achieved in over 95% of patients (611 out of 645 women), while bilateral occlusion was confirmed in only 88%.[7]



Delivery. A catheter placed through the operating channel of a small hysteroscope delivers low-power bipolar electrosurgical energy to the tubal orifice. A pushrod then delivers a small porous matrix of material into the tubal lumen.

IMAGES: RICH LAROCCO

Occlusion. Ingrowth of healthy, vascularized tissue occurs over approximately 3 months, to occlude the tubes. Retention of the matrix and tubal occlusion are documented by both transvaginal ultrasonography and hysterosalpingogram before patients may discontinue additional contraception.

Figure 1: Adiana

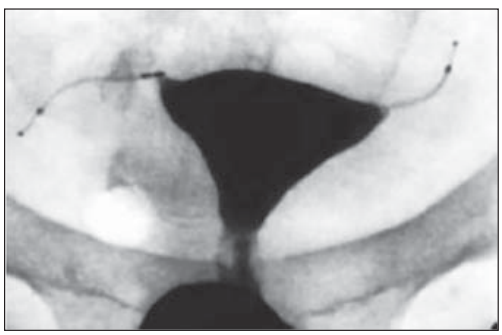
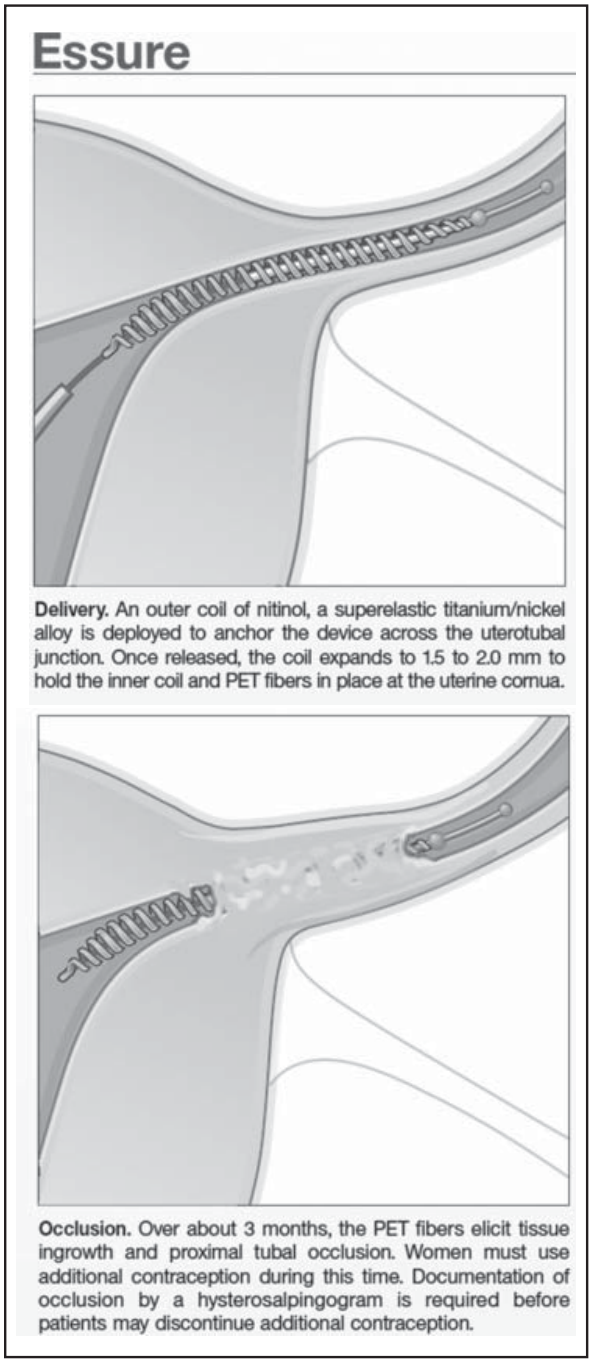


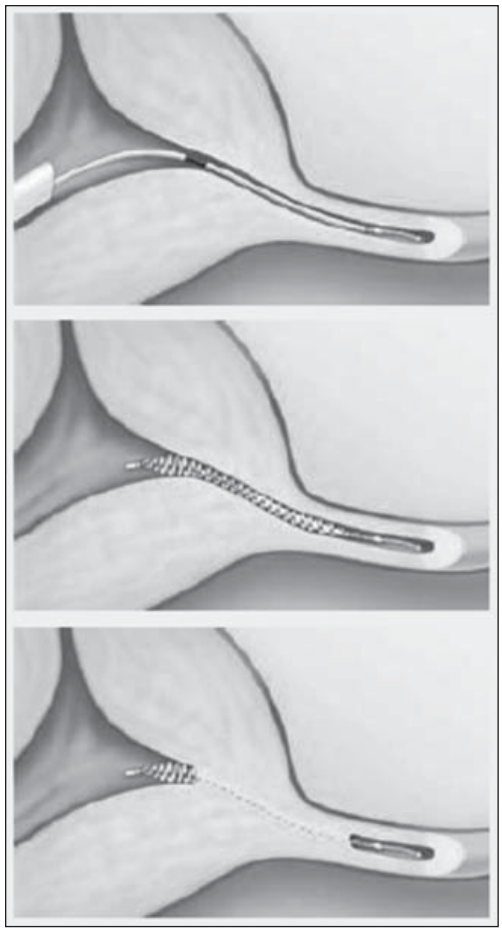
Figure 2

In 2001, Essure hysteroscopic sterilisation was introduced by Conceptus (incorporated by Bayer in 2013). The

technique involves insertion of a nickel titanium (nitinol) metal device into the fallopian tube which creates a blockage via fibrotic tubal occlusion. 2 The Essure device was licensed for use by the US FDA in 2002 (Figures 3 and 4) and is the only method currently being used.



Figures 3



Figures 4

It has two components: a micro-insert and a delivery catheter. The micro-insert is a spring-like device 40 mm in length and 0.8 mm in diameter. The micro-insert has an inner coil made of stainless steel, a nickel titanium (nitinol) elastic outer coil and polyethylene fibres. When released from the delivery system, the outer coil expands to 1.5–2.0 mm to anchor the micro-insert into the fallopian tube. The device is deployed using a continuous flow hysteroscope with a '5' French operating channel. Optimal placement is described as insertion with minimal resistance with three to eight coils left trailing in the uterine cavity. The polyethylene fibres induce fibrosis over a period of 3 months, thereby causing permanent tubal occlusion. Procedure is performed during the proliferative phase of the menstrual cycle reduces the likelihood of luteal phase pregnancy as does injectable contraceptive use before the procedure. Radiological follow-up In the UK and Europe the placement of an Essure device can be followed up by performing a pelvic ultrasound scan at 3 months post-procedure (Figure 5). Satisfactory location is defined as having less than 50% of the inner coil trailing into the uterine cavity or when the proximal marker of the inner coil is 30 mm or closer from where the contrast fills the uterine cornua.[9] The FDA approved transvaginal ultrasound in July 2015 as a confirmation test to confirm tubal occlusion in the USA. American Society for Testing and Materials standards the terminology specifies the

Essure device to be magnetic resonance-conditional, meaning a woman can undergo MRI scanning with static magnetic field of 3 tesla or less and maximum spatial gradient of magnetic field of 720 gauss/cm or less.[10]

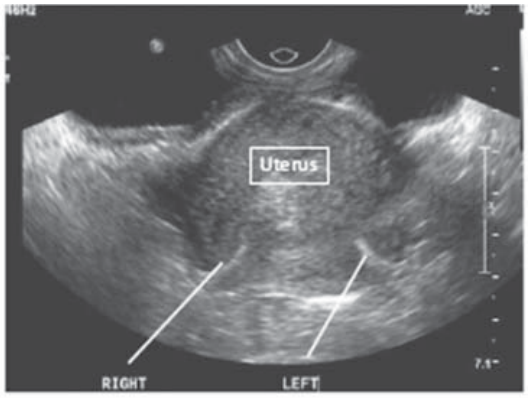


Figure 5. Transvaginal ultrasound of pelvis in transverse view showing bilateral Essure® device placed correctly in both fallopian tubes.

Figure 5

Successful bilateral placement of the Essure device is possible in 81–99% of cases.[8] Sterilisation was shown to be 99.83% effective based on a 5-year clinical study.[11] Worldwide, a retrospective study from France conducted from 2006 to 2010 reported pregnancy rates of 0.36% and 0.46% after hysteroscopic and laparoscopic sterilisation procedures, respectively.[12]

Table 1

Factors that contribute to failure of the Essure procedure
Non-compliance
Misinterpretation of the hysterosalpingogram
Luteal phase pregnancy
Failure to use contraception

Table 2

Complications associated with the Essure device [8,13]
Postoperative pain – 79%
Vasovagal syncope
Cervical/vaginal/prolonged bleeding
Thrush/infection
Spontaneous expulsion was 0.04–3.0%.
Perforation 1% and 2%.
Nickel allergy 14–18%
Chronic pelvic pain 2.1–24%
Abdominal migration is very rare. 0.04%
Unintended pregnancy

Role in infertility

Laparoscopic salpingectomy or tubal occlusion by Filshie clip in the management of hydrosalpinx has been shown to improve the pregnancy rate after in vitro fertilisation treatment. Essure can be an alternative option in cases with adhesions, pelvic inflammatory disease, Crohn's disease, endometriosis or laparotomies where the risk of laparoscopic salpingectomy or occlusion carries a significant risk. Arora et al. describe a rate of successful tubal occlusion of 98.1%. Live pregnancy rates per embryo transfer are 28%.[14]

Role in Endometrial ablation

The FDA has approved the third generation NovaSure, hydrothermal ablation and Gynecare Thermachoice for use with Essure sterilisation. Theoretical safety concern lies in the risk of transmission of heat energy via the micro-insert into the serosal layer and further to the intra-abdominal structures. The mean temperature has been studied and noted to be below 45°C at the serosal layer.[15]

Future developments

Ovion Eclipse is a newer technique, under development, designed to overcome the shortcomings of the Essure implant. The device is shortened by 2 cm. The system consists of an expandable outer tube with an inner matrix which causes tissue in-growth and occlusion via fibrosis.

AltaSeal device (Altascience Ltd., Dublin, Ireland) which is under pilot trial in Ireland. The implant is made of stainless steel with laser cuts on the surface similar to coronary stents. Procedure to be permanent contraception with immediate tubal occlusion and no need for confirmation at three months without the need for additional contraception.[16]

Medico-legal aspects

Medicines and Healthcare products Regulatory Agency after FDA review, issued a statement reassuring women regarding the overall safety of the device. There have been medico-legal lawsuits against hysteroscopic sterilisation using the Essure device. There is a paucity of long term longitudinal data on the outcomes of hysteroscopic sterilisation, hence It is important to inform women about the potential adverse effects caused by the device so that they can make an informed choice. Faculty of Sexual and Reproductive Healthcare recommends avoiding using the device in women with known hypersensitivity to nickel, irregular or heavy vaginal bleeding, chronic pelvic pain, autoimmune conditions and pelvic inflammatory disease.[17]

Hysteroscopic sterilization have a similar risk of unintended pregnancy but more than 10-fold higher risk of undergoing a reoperation when compared with laparoscopic sterilization.[18] The procedure, however, broadens the options for permanent birth control for women who have chosen to be sterilised especially in high-risk women in whom it is preferable to avoid abdominal incision or anaesthesia in an ambulatory setup. Information about the lack of long-term longitudinal data and any adverse effects should be closely monitored and reported.

FSRH and RCOG joint statement (June 2017) on Bayer's decision

to discontinue Essure, but like to reassure women that this is a commercial rather than a clinical decision and it does not represent any risks for women already using Essure.[19]

Table 3

Contraindications Approximately 10% of patients have factors that preclude bilateral device placement
Anatomic factors
Blocked or stenotic tubes
Intrauterine adhesions
Visual field obstructed by polyps, fibroids, or shaggy endometrium.
Lateral tubes
Device or procedure failures
Tubal spasm
Patient pain/intolerance
Device malfunction

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Native Tissue Repair of Prolapse: An alternative to Mesh

Treatment of Pelvic organ Prolapse aims to restore the anatomy of structures, mainly surgically. The surgical repair tecniques are classified as 'Native Tissue Repair' (NTR) when only pelvic organ support tissues are used, and Augmented Repair (AR) when some other material (prosthesis or graft) is used to reinforce the defective support system[1]. The present literature review describes the controversial role of mesh in POP (Pelvic organ Prolapse), because of which urogynecologists are moving towards alternative approaches[2]. The benefits of a more durable approach with mesh are being weighed against risks such as vaginal mesh extrusion and increased dyspareunia, and pelvic pain due to mesh shrinkage and scarring. The current opinion is that native tissue repairs have similar outcomes to synthetic mesh without the risks inherent in mesh use and remains the standard of care in a typical patient[3]. Chapel Hill reports the use of mesh for anterior prolapse to be assosciated with long term increased risk of any repeat surgery, especially mesh removal surgery. Mayo clinic reports natural tissue repair to be the procedure of choice for most women undergoing prolapse repair[4]. The 5 –year cumulative risk of any repeat surgery was significantly higher with the use of vaginal mesh than with the use of native tissue (15.2% vs 9.8%) with $p<0.0001$. However, a caveat is offered that native tissue repair must utilize best principles of surgical technique and incorporate a multicompartment repair to achieve an optimal outcome[4]. Intense debate goes on, so in 2011 after FDA warning, many transvaginal meshes were voluntarily withdrawn from the market. Based on the available scientific evidence due to increased risks assosciated with Transvaginal mesh for POP (Pelvic Organ Prolapse) repair, this should only be used when other surgical procedures have failed. Thus newer, isn't always better. Thus, native tissue repair procedures for POP like anterior and posterior colporrhaphy, uterosacral vaginal suspension and sacrospinous vaginal suspension still hold good even today.

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Growth Charts -Which ones to use ?

It is important to decide which growth charts to use as reference during antenatal fetal scanning to estimate fetal weight for gestational age as the number of SGA fetuses (less than the 10th percentile or Growth restricted fetuses less than the 3rd percentile) which get flagged up determines the attitude of the Obstetricians towards managing the rest of the womans pregnancy.

This is also true for LGA (greater than the 90th percentile)

It is an area of controversy whether a single growth reference is representative of growth, regardless of ethnicity or country of origin of the patient.

Studies have lately been published trying to assess which growth charts (old established ones, or the newer WHO or Intergrowth studies chart) i are most useful in predicting SGA and subsequent neonatal morbidity.

My talk will discuss these charts and the performance of these charts in an Indian municipal hospital setting versus an Indian corporate hospital setting.

Oral Presentations

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Arnimal Prize for Fetal Medicine and Genetics

[OP FM 1]

Non-invasive Fetal Lung Maturity Testing - Quantus FLM

Shantala Vadeyar, Maimoona Ahmed

Type: Case Series

Objective: To assess the fetal lung maturity in a non-invasive manner. Neonatal respiratory morbidity is the leading cause of morbidity and mortality in preterm and in early term infants or in infants of diabetic mothers. Till date fetal lung maturity has been determined by pulmonary surfactant in amniotic fluid. With improvements in computer capacity and image resolution, a quantitative analysis of an ultrasound image can be done where the textural patterns are used by algorithms to predict clinical information. Quantitative ultrasound fetal lung maturity analysis (Quantus FLM) is an example for predicting fetal lung maturity.

Materials & Methods: A prospective study over 6 months (March 2017-August 2017) of 60 pregnant women who were likely to deliver preterm due to various clinical indications such as diabetes, hypertensive disorders of pregnancy, growth restriction, spontaneous preterm labour, etc were studied. Quantus FLM test was performed prior to steroid administration and whenever possible, 48 hours post-steroid cover. The QFLM test results were classed as High Risk and Low Risk as per the algorithm. Their delivery details and neonatal outcome data were collected and studied.

Results: 19/60 had a High Risk result on Quantus FLM, of which 18 were less than 37 completed weeks of gestation and only one was more than 37 weeks. 9/19 delivered after 37 weeks and did not need steroids and had no neonatal lung morbidity. 7/19 that showed high risk and needed delivery before 37 weeks were given steroids, their post-steroid QFLM test showed low risk and none of these cases had neonatal respiratory morbidity (true negative). 3/19 needed delivery before or at 37 weeks and these cases that had tested as high risk did show some neonatal lung morbidity (true positive). Of the cases that tested as Low risk on QFLM, only one case had neonatal morbidity (false negative).

Conclusion: Quantus FLM is a good tool to assess fetal lung maturity non-invasively. It is especially useful in "grey-zone" cases, such as: late preterm and early term deliveries; 34+0 to 38+6 weeks, difficult to control hypertension or diabetes, moderate preeclampsia, obstetric cholestasis, previous unexplained fetal death or abruption, elective LSCS < 39 weeks. It has good negative predictive value and possibly could also be used to avoid steroid cover in pregnancies complicated by maternal diabetes.

[OP FM 2]

First Trimester Prediction of Preeclampsia in a Low Resource Setting: Development of mean arterial pressure nomogram and studying its performance

Saloni Arora

Type: Original Articles

Objective: To propose a simple model, applicable to low resource settings for prediction of PE by using MAP and MC.

Materials & Methods: This was a retrospective analysis of 5854 pregnant women. The reference range for MAP in first trimester was calculated in subjects with no maternal or immediate postnatal complications and a nomogram was constructed. The value of >95th centile was used to define screen positive. The prediction rate for PE was compared using MC, MAP and MC plus MAP.

Results: A combination of MC and MAP had a detection rate [DR] of 58 % for early PE (<34 weeks), 50% for late preterm PE (34 to <37 weeks) and 41% for term PE (?37weeks) at a fixed false positive rate of 10%.

Conclusion: First trimester MAP is a simple method for early identification of women at high risk for development of PE. As this is cost effective, it is highly suitable for resource constrained settings.

[OP FM 3]

Cardiovascular and Pregnancy Outcome in Women with Congenital Complete Heart Block: A single center experience from South India

Ashwini Radjaramin

Type: Original Articles

Objective: Early insertion of permanent pace maker in Congenital Complete Heart Block is shown to improve long term survival, especially in symptomatic patients. However, women with heart block may still present during pregnancy without pacemaker. We present our experience of managing the pregnant women with congenital heart block in a tertiary center from South India.

Materials & Methods: We retrieved data of pregnant women with congenital complete heart block during the time period 2013 to June 2018. Demographic data, details of the diagnosis and management of heart block were retrieved from the records. Management of labor and delivery were also collected. Outcomes reported are the use of pacing during labor and delivery, mode of delivery, neonatal outcome and complications.

Results: There were nine women with 21 pregnancies with congenital complete heart block during the time period. Four of them had permanent pacemaker implantation (PPI) prior to conception and another two had postpartum PPI. Among the three women without PPI, only one received temporary pacing during cesarean section. Among the 21 pregnancies,mean gestational age at delivery was 38 weeks. Cesarean section was done in 4 pregnancies. Mean birth weight was 2708.3 grams and there were 2 perinatal deaths. No maternal cardiovascular complications and neonatal cardiac malformations were reported.

Conclusion: Under multidisciplinary team care in a tertiary center, women with congenital complete heart block can achieve successful pregnancy outcome without increasing the risk of cardiovascular complications.

[OP FM 4]

Prenatal Diagnosis in Genetic Conditions - DNA banking to the rescue!

Shruti Bajaj, Shantala Vadeyar

Type: Case Series

Objective: Often the index case is suspected to have a genetic disorder, but incompletely diagnosed. Couples may directly

come for prenatal counseling and want a prenatal diagnosis in the next pregnancy. The index case may not always be available for further targeted genetic testing. In such scenarios, the rational application of the newer genetic tools can provide complete and reliable answers.

Materials & Methods: Case 1: 1. A 10 month old male, born of third degree consanguinity, presented with neuroregression, splenohepatomegaly and recurrent jaundice The clinical suspicion was Niemann-Pick-disease (NPD), caused by the deficiency of lysosomal enzyme, sphingomyelinase. Serum sphingomyelinase was low, but not confirmatory. Next generation sequencing (NGS)-based analysis of the SMPD1-gene associated with NPD was unyielding. The expired child's DNA had been banked by the genetic laboratory. This DNA was retrieved and further genetic tests were applied.

Case 2: A consanguinous couple lost their 4 month old male child, 11 years before presenting to us at 6 weeks in a new pregnancy. The deceased child had central hypotonia, delayed development, cardiac conduction abnormality and visual disturbances. 11 years ago, no definite diagnosis was reached, but the DNA had been banked. Hence, DNA was retrieved from the laboratory and was subjected to whole-exome sequencing (WES).

Results: Case 1: MLPA yielded pathogenic homozygous variant in SMPD1 gene, confirming NPD. Having detected the error at the genomic level, conclusive prenatal diagnosis for NPD was now possible. The couple's anxiety over their additional risks for autosomal recessive disorders due to consanguinity, prompted us to send the parental carrier tests. It detected that both partners were also carriers for Neurodegeneration-due-to-cerebral-folatetransport-deficiency. Thus the parents were carriers of two serious AR disorders and were counselled regarding their reproductive options.

Case 2: WES yielded homozygous pathogenic variant associated with Intellectual - developmental - disorder - with - cardiac-arrhythmia (IDDCA) in the deceased proband. The parents were carriers for the same variant. Prenatal diagnosis could now be offered for the current fetus by way of amniocentesis at 17 weeks. Analysis revealed the fetus to be a carrier too, thus the pregnancy was continued confidently.

Conclusion: DNA banking is an inexpensive and vital tool to provide prenatal diagnosis in the next pregnancy by analysis of a retrospective sample. Close coordination with a Clinical Geneticist is necessary to apply the right test and also in interpretation of the analysed data to arrive at the pathogenic variants. In consanguinous and highly endogamous couples, carrier screening is a potential tool to prevent serious Autosomal Recessive disorders.

[OP FM 5]

Study of MTHFR Gene Mutations and Other Risk Factors in Recurrent Pregnancy Loss

Rini Pachori

Type: Original Articles

Objective: To study the association between MTHFR gene mutations (C677T & A1298C) and various other risk factors with Recurrent pregnancy loss.

Materials & Methods: Ours was a case-control study where after evaluating high risk factors in history and examination, 10 ml blood samples were drawn from 86 women with RPL (Cases) and 100 matched Controls with previous live birth and no RPL. Samples were evaluated for MTHFR gene mutations (C677T & A1298C), fasting serum homocysteine levels, fasting serum folate, fasting insulin and glucose, maternal karyotyping, thyroid function tests and Anti-TPO antibodies over a period of 24 months.

Results: The MTHFR C677T mutation was found to be significantly associated with RPL (Homozygous mutant – cases-3.5% vs controls- 0%, p-value = 0.03) but the A1298C mutation was not found to have an association (Homozygous mutant – cases-22.1% vs controls-12%, p-value=0.16). Increased serum homocysteine levels were significantly associated with RPL (cases-12.8% vs controls-4%, p-value=0.03). Low serum folate levels were also seen to have a significant association (cases-26% vs controls-8%, p-value=0.03). Increased fasting insulin levels were also significantly associated with RPL (cases-30% vs controls-10%, p-value=0.02). Both hypothyroidism and subclinical hypothyroidism were found to have a statistically significant association (p-value=0.01). Fasting serum glucose, Anti-TPO antibodies, maternal karyotyping and serum prolactin levels were not found to have an association with RPL.

Conclusion: The MTHFR C677T mutation, hyperhomocystenemia, hyperinsulinemia, low serum folate levels, hypothyroidism, subclinical hypothyroidism, history of pelvic inflammatory disease and history of cervical manipulation are all risk factors for RPL and need evaluation in every case.

[OP FM 6]

Aorto-pulmonary Septal Defect: Prenatal diagnosis by fetal ECHO, its association with non-cardiac anomalies and post-natal confirmation by autopsy

M Monica Reddy

Type: Case Report

Objective: Aortopulmonary septal defect or Aorto pulmonary window is a rare congenital heart disease where there is communication between the ascending aorta and pulmonary artery in the presence of separate semilunar valves. It constitutes 0.1–0.2% of all cardiac defects in live births. The risk of genetic or chromosomal abnormalities with it is low. It can be diagnosed prenatally usually at the level of the three-vessel view. It may occur as an isolated lesion or may be associated with other cardiac defects like VSD, ASD, PDA, interrupted aortic arch etc. in approximately 50% of cases. Extracardiac abnormalities are uncommon.

Materials & Methods: Case report: A 27 year old primigravida was referred at 22 weeks of gestation in view of fetal cardiac anomaly. She belonged to upper middle class and was married since 3 years, which was a non-consanguinous marriage. She had no history of drug intake, radiation exposure. On ultrasonogram there was anhydramnios, plagiocephaly of the fetal head, double bubble sign, severe fetal growth restriction. Fetal echocardiography demonstrated presence of type 2 aortopulmonary window with common arterial trunk. Within one week there was intrauterine demise of fetus. A 693 gram male fetus was expelled after foley and extra-amniotic saline instillation. Autopsy was done.

Results: Due to the rarity and difficulty in diagnosis of the condition, previous literature on APW is restricted to case reports and series. The prognosis depends on associated defects. Isolated APW have an excellent outcome. Association with complex congenital heart disease can be a bad prognostic factor. Our case had a type 2 Aortopulmonary window with imperforate anus, obstructed bowel loops and phagiocephaly with poor prognosis.

Conclusion: Aortopulmonary window, although rare can be diagnosed prenatally by fetal echo. It can be associated with non cardiac anomalies with poor outcome.

[OP FM 7]

Irregular Antibody Screening for Women with Significant Obstetric History and Fetal Hydrops

Aastha Raheja

Type: Case Report

Objective: To highlight the importance of conducting irregular antibody screening for women with significant obstetric history and fetal hydrops

Materials & Methods: We report a case of a patient with AB negative blood group with positive indirect coombs test with rising MCA-PSV titres on follow up visits. Intrauterine transfusion with O negative leucodepleted blood was done and fetus blood group reported to be B negative with positive Direct Coombs test. On further evaluation request for screening of unusual antibodies was made and anti c, anti d and anti g antibodies was found to be positive. The baby was treated postnatally with double volume exchange transfusion with same compatible blood. However,the baby expired after 2 weeks.

Results: Haemolytic disease of the newborn is a well-recognised entity because of the isoimmunisation of Rhesus D-negative mother in an Rh-positive fetus. Although anti-Rh(D) was once the major etiology of haemolytic disease of the fetus and newborn (HDFN), the widespread adoption of antenatal and postnatal Rhesus immunoglobulin has resulted in a marked decrease in the prevalence of alloimmunisation due to the RhD antigen present during pregnancy. Maternal alloimmunisation to other red cell antigens remains the cause of fetal disease since no prophylactic immunoglobulins are available to prevent the formation of these antibodies

Conclusion: Blood bank guidelines for screening of maternal serum antibodies and facilities have to be updated to decrease the occurence of preventable perinatal morbidity and mortality as the potential for developing immune hydrops due to irregular red blood cell antibodies remains high.

[OP FM 8]

Rare Causes of Hypertension in Pregnancy

Sangeeta Yadav

Type: Original Articles

Objective: To analyse the rare causes of hypertension in pregnancy which was not pregnancy related but presented for first time in pregnancy.

Materials & Methods: It was a retrospective analysis of causes of hypertension unrelated to pregnancy referred in the antenatal clinic of Maternal and Reproductive Health department, SGPGIMS, Lucknow, between July 2013 to June 2018. Detailed history and examination as per a structured proforma performed. Necessary investigations were done to diagnose maternal medical disease as indicated. Appropriate genetic counselling was done as required, risk of fetal affection and need for further follow up explained

Results: 18 pregnancies were diagnosed with hypertension unrelated to pregnancy. The cause was found to be Takayasu arteritis in 6 patients, chronic kidney disease in 7 patients, autosomal dominant polycystic kidney disease in 3 patients, coarctation of aorta in 1 patient and pheochromocytoma in 1 patient. All patients were managed with multidisciplinary collaboration and had good outcome

Conclusion: Unusual causes of hypertension in pregnancy are often unrecognised and misdiagnosed as preeclampsia thus leading to improper treatment and maternal and neonatal adverse events. This study highlights the importance of extremely detailed history and physical examination and investigating pregnant woman for secondary causes of hypertension so as not to miss the rare treatable causes of hypertension in pregnancy which has potential for catastrophic consequences if unrecognised. Management can be quite challenging in cases of refractory hypertension as apart from antihypertensive therapy, interventional therapy or surgery may be required during pregnancy for good outcome.

[OP FM 9]

Acute Fatty Liver of Pregnancy- Review of successful management of three cases at tertiary care center

Manjushree B S

Type: Case Series

Objective: To review successful management of three cases of AFLP at a tertiary care center, factors responsible for good fetal maternal outcomes

Materials & Methods: Retrospective review of three pregnant women, reffered from outside, all in the third trimester presented with symptoms of vomiting, fever, epigastric discomfort, two of them with full blown jaundice and one with IUD. All of them had abnormal coagulation profile done outside. History with detailed clinical examination and lab investigations led us to a early diagnosis, involvement of a multidisciplinary team , followed by a immediate delivery and further management in intensive care unit.

Results: Following a expeditious delivery and rigorous monitoring in ICU, all three patients recovered completely and were discharged home in a stable condition. Two out of three fetuses survived and discharged home in a stable condition. One of them was already an IUD on referral.

Conclusion: AFLP having a maternal mortality of 16-18 % and fetal mortality of 23%, Early diagnosis, expeditious delivery, involvement of multidisciplinary approach in a tertiary care center remains the mainstay of treatment for good maternal and fetal outcomes.

[OP FM 10]

To Reduce or Not to Reduce? – Single centre experience of perinatal outcomes following reduction in twin pregnancies

Smriti Prasad

Type: Original Articles

Objective: There is no universal consensus regarding elective reduction in twin pregnancies. The objective of this study was to determine whether reduction of twin pregnancies to singletons is associated with improved perinatal outcomes

Materials & Methods: A retrospective cohort analysis was performed at Apollo Centre for Fetal Medicine, New Delhi comparing pregnancy outcomes in dichorionic diamniotic twin pregnancies managed expectantly and those which were reduced to singletons over the last 10 years. Comparison of continuous and categorical variables were conducted using Mann- Whitney U test / Student t test and Fischer's exact test respectively. Statistical significance was agreed at $p < 0.05$.

Results: 339 expectantly managed twin gestations and 31 twin pregnancies reduced to singletons were included, the complete outcomes of which were available for analysis. Women with previous history of preterm labour, Mullerian anomalies and twins reduced for discordant anomalies were excluded. Women reduced to singletons from twins had significantly lower rates of preterm delivery <37 weeks (8% versus 59%, $p<0.001$) and <34 weeks (5% versus 24%, $p<0.02$), but there was no difference in the rates of preterm births <32 weeks or maternal complications like Gestational Diabetes or Hypertensive disorders of pregnancy. The mean birth weight was also significantly higher in the reduced group. There was no difference in the early pregnancy loss rates (<24 weeks) between the two groups. It was calculated that six reductions (95% CI= 5-8) need to be performed to prevent one preterm delivery <34 weeks.

Conclusion: In our experience, fetal reduction of twin pregnancies appears to be a safe procedure and reduces the risk of prematurity with higher birth weight at delivery without any concomitant increase in the early pregnancy loss rates. Therefore, elective twin reduction can be offered as an option to parents seeking it with informed counselling.

[OP FM 11]

Role of Genetic Evaluation in the Index Pregnancy

Aditi Agarwal

Type: Original Articles

Objective: To study and compare the benefits of postnatal examination, ultrasound and gene mutation evaluation of index pregnancy affected with genetic disorders and its impact on the course and prognosis of future pregnancies

Materials & Methods: This is a retrospective study where all the referral cases from the Genetics Clinics to Bangalore Fetal Medicine Centre were evaluated. The pre-pregnancy investigations were evaluated. The genetic studies, prenatal ultrasound findings and postnatal evaluation of the index child were studied to investigate and prognosticate the present pregnancy.

Results: The management of the present pregnancy was significantly better when complete evaluation of the affected index child was available

Conclusion: The genetic evaluation of the affected pregnancy is of paramount importance in the management of future pregnancies

[OP FM 12]

First Trimester Prediction of Preeclampsia in a Low Resource Setting: Comparing Performance of MC, MAP and a combination of MC and MAP

Saloni Arora

Type: Original Articles

Objective: To propose a simple model, applicable to low resource settings for prediction of preeclampsia by using Mean Arterial Pressure [MAP] and Maternal Characteristics [MC]

Materials & Methods: This was a retrospective analysis of 5854 pregnant women. The reference range for MAP in first trimester was calculated in subjects with no maternal or immediate postnatal complications and a nomogram was constructed. The value of >95th centile was used t

Results: The detection rate for prediction of preeclampsia (especially for early preeclampsia) was better by using first trimester MAP as compared to MC alone (46% versus 28% at fixed false positive rate of 10% respectively). The combination of two i.e MC and MAP

Conclusion: First trimester MAP is a simple method for early identification of women at high risk for development of PE and performs better than history alone. It can be incorporated into routine care.

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Dr R P Soonawala Obstetrics Award

[OP OBS 1]

Urine Albumin Creatinine Ratio an Early Marker of Pregnancy Related Outcomes: A prospective observational study

Gazala Shahnaz

Type: Original Articles

Objective: To evaluate the sensitivity, specificity and predictive value of Urine Albumin creatinine in early pregnancy as a marker of pregnancy-related outcomes. To evaluate correlation and strength of association between urine albumin-creatinine ratio and adverse outcomes.

Materials & Methods: One hundred fifty women with singleton nonanomalous pregnancy, with no antecedent hypertension, diabetes and renal disease, who are sure of last menstrual period and whose dating was confirmed by first-trimester ultrasound scan were included in the study. One random spot urine sample under standardized conditions i.e. first voided, morning, mid stream urine was collected at 20-24weeks visit. The urine albumin concentration was measured by the Biuret method, and the urinary creatinine concentration was measured by Jaffe's method. Median albumin-creatinine ratio (ACR) was

calculated. According to standard protocol, subjects were called up at regular intervals till delivery. All the patients were assessed, investigation sent and necessary interventions done according to standards followed in our hospital. Patients were further followed and assessed during ANC visits till delivery for adverse maternal outcomes like Preeclampsia, Preterm labor, PTPROM and fetal outcomes like IUGR.

Results: The mean age of the study population was 27±3 years. It has no significant effect on any adverse maternal or fetal outcomes. Although parity had a significant effect (p<0.49) on preterm delivery, we had equal no. of 49%(n=73) primigravida and 51% (n=77) multigravida in our study population, Mean weight of study group at their first visit was 53.33kg. Patients weight gain was approximately 10.3kgs during their entire gestation period. It had no effect on any outcomes. Mean Systolic blood pressure at 1st visit 110±8 mmHg and Diastolic blood pressure at 1st visit 71±7 mmHg and no patients with chronic hypertension were included. 18% of cases (n=27) developed microalbuminuria. 82%cases (n=123) had normal urine albumin-creatinine ratio. While 85 patients had uneventful pregnancy outcome, 65 patients had various adverse outcomes. Of these 11 females had preterm premature rupture of membranes, 21 had preterm delivery, 13 developed preeclampsia and 20 had intrauterine growth restriction. Urinary ACR is although a good diagnostic tool for identifying pregnancies with a risk of developing PTPROM (p< 0.007, the diagnostic accuracy of 81.33%), It has a sensitivity of 45.55% and positive predictive value of mere 18.52%. It is a good tool to exclude patients at risk of having PTPROM but lacks the feature as a good screening method for predicting patients at risk of PTPROM. Urinary ACR is again a very good diagnostic tool for identifying pregnancies with a risk of developing Preterm delivery (p< 0.000, diagnostic accuracy=81.33%). It has sensitivity and specificity of 47.62% and 86.62% respectively. Positive and negative predictive value of urinary ACR for Preterm delivery is 37.04%% and 91.06%. Despite having very significant p-value poor sensitivity and positive predictive value doubt its role as an ideal screening tool to predict preterm deliveries. Urinary ACR has a very significant p-value <0.000 and diagnostic accuracy as a diagnostic tool for predicting IUGR. Again poor sensitivity of 55.00% and positive predictive value of 40.74% renders its liability as an ideal tool for predicting IUGR inconclusive. Urinary ACR has a very significant p-value <0.000 and diagnostic accuracy=88% as a diagnostic tool for PE. It has quite high sensitivity, specificity and negative predictive value of 84.62 %, 88.32%, and 98.37% respectively. So urinary ACR is a significant as well as ideal screening tool for predicting pregnancies at risk of PE.

Conclusion: There is a statistically significant association between urine albumin creatinine ratio and various pregnancy outcome (p<0.05 for Preterm, Preeclampsia, IUGR, and PTPROM). Urinary ACR with a good sensitivity and specificity is an ideal screening tool for identifying patients at risk of developing preeclampsia. However, It doesn't have required sensitivity to be a recommended screening tool for predicting other adverse outcomes. Thus, further studies on a larger patient population with these outcomes are warranted.

[OP OBS 2]

Study on Evaluating the Effectiveness of Fetal Scalp Lactate Sampling in the Assessment of Fetal Well-being during Labour

Krishnaveni Nayin, Ragasudha

Type: Original Articles

Objective: To evaluate the effectiveness of fetal scalp lactate sampling in the assessment of fetal well-being during labour.

Materials & Methods: Retrospective case notes analysis of 80 mothers who had fetal blood sampling done for CTG abnormality from January 2018 to July 2018 at Fernandez Hospital, Hyderabad, India.

Results: Out of 80 women 74 women had fetal scalp lactate higher than 4.8. 59% of these women had IOL and 41% had spontaneous onset of labour, 85% women had FBS in first stage of labour, 15% of women had FBS in second stage of labour. 97% of the women had FBS for suspicious CTG, 3% of women had FBS for pathological CTG.93% of women had scalp lactate levels more than 4.8. 92% of the women had emergency caesarean section, and 8% of the women had instrumental deliveries. After the delivery 31% of the babies had cord arterial PH less than 7.20 and 15% had cord arterial PH between 7.21 to 7.25. 54% of babies had cord arterial PH more than 7.25. 40% of the babies had cord arterial lactate more than 4.8.None of them had base excess more than 12. Only 3% of the babies had Apgar's less than 7 at 1 min. 38% of the babies had meconium stained liquor at birth.28% babies had admission to NICU.10% of the babies had birth weight less than 2.5 kgs.

Conclusion: There is increased association between increased lactate levels and induction of labour and there is no association between duration of labour and fetal scalp lactate levels, increased fetal scalp lactate levels have resulted in increased operative interventions, especially caesarean sections. Only in 40% of the women fetal scalp lactate matched with the fetal cord arterial lactate after the delivery. Hence it is very crucial interpret the CTG appropriately and use the fetal scalp lactate sampling in the assessment of fetal well-being during labour to reduce the operative interventions.

[OP OBS 3]

Association of Apolipoprotein E Gene Polymorphism and Serum TNF Alpha with Lipid Profile in Preeclampsia

Lal NS, Guleria K, Banerjee BD, Sharma R

Type: Original Articles

Objective: Pathological dyslipidemia resulting in obstetric vasculopathy represents a common pathway through Apolipoprotein E (ApoE) gene responsible for reverse transport cholesterol system and TNF? representing inflammation; appears to act and result in preeclampsia (PE). This study was aimed to evaluate the association of ApoE gene polymorphism and serum TNF? with lipid profile in preeclamptic women.

Materials & Methods: A case control study conducted on180 subjects; group I PE(n=90) and group II(n=90) normotensive controls. At recruitment 5ml of venous blood was collected after

overnight fasting -1ml for ApoE gene polymorphism by PCR, 3ml for lipid profile by Synchron Lx® system and 1ml for TNF? by ELISA kit.

Results: Incidence of PE was 11.4% in our study population. Significant association included low socioeconomic status, muslim religion increased iatrogenic preterm deliveries and operative interventions, low neonatal birth weight and more NICU admissions in preeclampsia group. Prevalence of dyslipidemia was significantly high (82%) in PE group as compared to 59% in control group. Total cholesterol, LDL, and triglycerides rose by 1.19, 1.29 and 1.39 folds respectively and HDL decreased by 0.9 folds of normal pregnancy levels in preeclampsia. Apo E genotype ?3/?4 was most prevalent in preeclampsia group. Serum TNF? was significantly higher in PE group(p=0.04). Significant positive correlation of genotype ?3/?4 with high levels of serum TNF? was observed in cases.

Conclusion: Dyslipidemia acts as independent risk factor for Preeclampsia. Genotype ?3/?4 and high serum TNF? are significantly associated with preeclampsia and a positive correlation between the two suggest susceptibility of an individual to develop disease.

[OP OBS 4]

Prevalence of Gestational Thrombocytopenia and Fetomaternal Outcome

Neha

Type: Original Articles

Objective: To know the prevalence of gestational thrombocytopenia among antenatal patients. To study the feto-maternal outcome in mild, moderate and severe gestational thrombocytopenia.

Materials & Methods: It is a prospective observational study done in Department of Obstetrics and Gynaecology in medical college over a period of six months. All antenatal women underwent complete hemogram with platelet count in the third trimester. Those with platelet count <1, 50,000/ ?L were included and divided into three groups on the basis of platelet count. Maternal and fetal outcome was seen. Cord blood was sent for neonatal platelets count. Follow up was done in these cases till 6 weeks postpartum.

Results: Prevalence of gestational thrombocytopenia was 12.82%. Feto-maternal outcome was favourable. Total five patients suffered from abruption. Postpartum hemorrhage was present in about 7 cases. Blood transfusion including platelets transfusion was needed in around 13 cases. There was no maternal mortality. Only 6 (3%) neonates were having thrombocytopenia (Platelets count less than 1.5 lacs /cumm) regardless of degree of maternal thrombocytopenia. 26 (13%) neonates were admitted in nursery for monitoring, among these 11 (5.5%) needed ventilation. There was no neonatal death.

Conclusion: Better feto-maternal outcome is there in gestational thrombocytopenia. So vigilant and careful monitoring can prevent any adverse event.

[OP OBS 5]

To Study the Outcome of Pregnancy in Patients with Cardiomyopathies

Astha Jain

Type: Case Report

Objective: To study the outcome of pregnancy in patients with cardiomyopathies.

Materials & Methods: A report of 2 cases of cardiomyopathy in pregnancy.

Results: Case 1 - Dialated cardiomyopathy with Atrial Fibrillation. Booked patient G2P0A1 with 36 wks pog- K/C/O DCM with AF (diagnosed in 3rd month of pregnancy due to persistent bradycardia) admitted with c/o breathlessness on lying down since previous night. Patient evaluated. O/E sign and symptoms suggestive of heartfailure P/A- corresponding the gestational age. 2D echo done suggestive of atrial fibrillation, LVEF- 23% global hypokinesia of LV. Obs usg - SLIUF corresponding to gestation, breech, Doppler parameters. Patient managed with ccm and cardiologist team but emergency LSCS done in viewof worsening dysnea with heart failure (NYHA grade 4), patient delivered a girl as breech of weight 2.25 kg. Patient had 1 episode of atrial fibrillation with fast Ventricular rate on POD 1 managed with inj digoxin. Patient improved well and dischared in stable condition.

Case 2: peripartum cardiomyopathy with heart failure. Unbooked patient G3P1L1A1 with 30weeks+6 days POG with previous 1 LSCS oligohydramnios with PIH came admitted with c/o breathlessness and cough since 2 days. In previous pregnancy patient had GHTN and breathlessness after delivery which was not evaluated. Present pregnancy (GHTN) taking Tab. Lobet 100mg TDS since 27 weeks of gestation). O/E suggestive of hypertension and sign and symptoms of heart failure. P/A- 32 weeks, cephalic, Uterus relaxed, FHS+, N-Terminal Pro B-Type Natriuretic peptide: 309.60 and 2D echo cardiography- Global hypokinase LVEF 25-30 %, moderate TR. Diagnosis of peripartum cardiomyopathy with heart failure (NYHA grade II-III) was made. Patient was admitted in ICU and managed conservatively by CCM, cardiology and Obstetric team. Initially patient improved. on 6th day of admission patient started deteriorating having sign and symptoms of heart failure on rest (NYHA grade IV), patient was taken for emergency LSCS (POG 31weeks+5days) in view of peripartum cardiomyopathy with heart failure under GA. Patient delivered An alive baby female was delivered weighing 1.355 kg. postoperative period uneventful. Patient discharged in stable condition.

Conclusion: Pregnant women with cardiovascular conditions can, with appropriate knowledge and counselling, be managed safely in specialist multi-disciplinary centres with intensive care units by team efforts of cardiologist, obstetrician, anesthesist and pediatrician to ensure a successful outcome for mother and child Now a days an increasing number of women with cardiac disease are going through pregnancy successfully.

[OP OBS 6]

Unusual Presentation of Angular Pregnancy

Swathi K

Type: Case Report

ABSTRACT REVIEWERS SCORE 8

Objective: Angular pregnancy is a rare entity, seldom discussed in the medical literature, with <100 cases reported. Most cases are asymptomatic and some cases present with abdominal pain and vaginal bleeding. While angular pregnancies should be considered a potentially viable intrauterine pregnancy, this case report describes an unusual presentation of angular pregnancy.

Materials & Methods: Case Report: A 29 yr old, primigravida, spontaneous conception booked at our hospital at 10 weeks gestation, She was pregestational diabetes and chronic hypertensive on treatment. Had regular antenatal checkups and was started on Low dose aspirin in view of her risk factors. 12 week scan revealed a single live intrauterine pregnancy corresponding to gestational age and 2 intramural fibroids largest measuring 41?37 mm above the cervix. Antenatal period was managed as per her risk factors and was uneventful. She was induced at 37 weeks in view of maternal risk factors (Chronic HTN and Pre-GDM). 4 hours into active labour, she gave birth to a healthy female baby of birth weight 2.98 Kg. Placenta was not expelled for 1 hour. Planned for Manual Removal of Placenta under General anesthesia. Extraction of placental tissue attempted, with gentle traction on the umbical cord, the cord snapped with a bit of placental tissue. The remaining placenta could not be reached even with forceps. NTG given IV for uterine relaxation and manual removal attempted again which was unsuccessful. Ultrasound done to rule out any adherence, revealed placental tissue near fundus. Opinion of 2 senior consultants taken and decided for conservative management and an MRI as she was not actively bleeding. MRI done revealed A well circumscribed mixed signal intensity, predominantly hypointense on T1W and iso-hyperintense on T2Wmeasuring 12?9 cm mass occupying left cornual region, features consistent with retained placental tissue. Features of significant myometrial thinning and non-delineation of myometrium with only serosa and bridging vessels noted overlying the retained placenta suggestive of impending rupture. Decision taken for Hysterotomy. Explained the possibility of hysterectomy in view of impending rupture. Explained to the family and consent obtained. Intraoperatively, minimal collection noted in peritoneal cavity. Uterus -24 weeks size, A bluish bulge noted at the left cornual region with serosa intact. Hysterotomy performed and placenta removed manually. No evidence of adherence. Gentle exploration of uterine cavity done and found to be empty. Uterus was closed in 2 layers. Complete haemostasis achieved. Total Estimated blood loss was 1800 ml since delivery. 2 units PRBC transfused in postoperative period. She made uneventul recovery.

Results: Angular pregnancy (defined in 1898 as "implantation of the embryo just medial to the uterotubal junction, in the lateral angle of the uterine cavity" and medial to the round ligament. At MR imaging, angular pregnancies appear as gestational sacs implanted in the lateral angle of the uterus and can be confused with normal pregnancies. A gestational sac surrounded by T2 hyperintense endometrium suggests an angular pregnancy, while a sac surrounded by T2 hypointense myometrium suggests an interstitial pregnancy.

Conclusion: In conclusion, angular pregnancy is a difficult diagnosis during pregnancy unless 3D imaging is used. In this case it was an unusual presentation with no symptoms and uneventful till after delivery of the baby. As she was haemodynamically stable and a bed side ultrasound showed placental tissue near the uterine fundus, an appropriate desicion was made to do a MRI which diagnosed angular pregnancy with impending rupture. This helped in decision for hysterotomy which was successful. She made an uneventful recovery.

[OP OBS 7]

Prediction of Adverse Effects of Preeclampsia

Khushboo Tongaria

Type: Original Articles

ABSTRACT REVIEWERS SCORE 8

Objective: To study the relation between various clinical and laboratory variables and occurrence of adverse maternal and neonatal outcomes in pregnancy

Materials & Methods: A prospective observational study on 497 women who fulfilled definite inclusion and exclusion criteria was conducted. Subjects were monitored for clinical symptoms of preeclampsia, biochemical parameters, and adverse maternal and neonatal outcomes. The predictors of adverse outcome were found using multivariate logistic regression where stepwise forward LR method was used for best model selection.

Results: 29.58 % (n = 147) had adverse maternal outcome, 73.33% (n= 364) had adverse perinatal outcome and 75 % (n = 374) had combined adverse maternal and perinatal outcome. Headache 34.3 % (n = 171) and chest pain/ dyspnea 6.80 (n = 10) came out to be statistically significant for adverse maternal outcome whereas nausea/vomiting 12.64 (n = 50) and headache 39.56 (n = 171) outcome were significant for adverse perinatal outcome. In combined maternal + perinatal adverse outcome, headache 39.30% (n = 171) was only statistically significant. In examination findings all three blood pressures -systolic, diastolic, mean blood pressure were significant ($P < 0.001$). Under simple biochemical investigations, the mean value of all (haemoglobin, haematocrit, platelet, urine albumin etc) were found to have significant association with adverse maternal and perinatal outcome. In multivariate analysis after applying logistic regression model - headache, chest pain/dyspnea, SPO2, hemoglobin, international normalised ratio, SGPT were significant for adverse maternal outcome. Significant predictors for adverse perinatal outcomes identified were gestational hypertension in present pregnancy, headache, SBP and urine albumin. Significant predictors for predicting both adverse maternal and perinatal outcome were identified as Gestational Hypertension, Headache, SBP, Hb, urine albumin.

Conclusion: The model is based on the use of few important clinical and biochemical parameters and does not require extensive laboratory testing. Although it might be of limited use in a well-equipped tertiary care facility, this model can be utilized in the setting of district or sub-district level hospitals. This study provides evidence that simple clinical and biochemical parameters maintains its utility as a prediction tool to be used as a rule-in test for adverse maternal outcomes.

[OP OBS 8]

Association of mRNA Expression of Interleukin-6 and Interleukin-10 with Organochlorine Pesticides

Deepika

Type: Original Articles

ABSTRACT REVIEWERS SCORE 9

Objective: India is leading all the nations in preterm births(PTB), as reported by WHO. Despite extensive research the exact cause

of PTB remains elusive. The present study aimed to gain insight into gene (pro-inflammatory IL-6 and anti-inflammatory IL-10) and environment (organochlorine pesticides-OCPs) interaction in etio-pathogenesis of PTB.

Materials & Methods: Maternal blood and placental tissue samples of idiopathic PTB cases (n=75) and term normal (n=75) were collected at the time of delivery. mRNA expression of IL-6 and IL-10 gene was analysed using Real-time PCR and OCP levels by gas chromatography.

Results: mRNA expression of IL-6 gene was 2.36 fold high in maternal blood and 3.49 fold higher in placental tissue in PTB compared to term deliveries. mRNA expression of IL-10 gene was 2.3 fold lower in placental tissue of PTB compared to term deliveries. Significant association was found between the higher levels of beta-hexachlorocyclohexane(HCH) and dichlorodiphenyldichloroethylene (DDE) in maternal blood with PTB (OR 1.48 and 1.248 respectively). Also, significant association was found between higher levels of para-dichlorodiphenyltrichl oroethane(DDT) and DDE in placental tissue with PTB (OR 1.094 and OR 2.771 respectively). Interaction between IL-6 gene and levels of beta-HCH resulted in significant reduction in period of gestation(POG) by 14-22 days and interaction between IL-10 gene and beta-HCH levels by 10 days.

Conclusion: The gene(IL)-environment (OCPs) interaction resulted in significant reduction of POG ranging from 1-3 weeks. Thus, the present study identified the gene-environment interaction as potential risk for PTB and emerges as a molecular tool in etio-pathogenesis of preterm birth.

[OP OBS 9]

Retrospective Study of Non – obstetric Pain Abdomen in Pregnancy: A review

Shweta Gangal

Type: Original Articles

Objective: Acute abdomen in pregnancy is one of the leading dilemmas in diagnosis and management. Incidence of acute abdomen in pregnancy is 1:500-635 pregnancy. The aim of our study is to analyse the trend and management modality of Non-obstetric pain abdomen in pregnancy in retrospect in Fortis Memorial Research Institute, Gurugram over a period of 2 years from August 2016 to July 2018.

Materials & Methods: Total 189 cases of pregnancy with pain abdomen were reviewed over a period of 2 years from August 2016 to July 2018 in FMRI, Gurugram. 156 cases with Obstetric causes were excluded, studying 33 cases of Non –Obstetric causes of Acute abdomen in pregnancy with 6, 17, 10 cases each in I, II and III Trimester comparing causes and management in all Trimesters.

Results: Of the total 33 cases of Acute Abdomen in Pregnancy, 6 (18.2%) cases, 17 (51.5%) cases and 10 (33.3%) cases were in I, II and III Trimester. In I Trimester, all 4(6.7%) cases of Non-Obstetric causes of Pain abdomen in Pregnancy were managed conservatively. 1 case of Twisted Ovarian cyst had Laparoscopic Ovarian Cystectomy. 1 case of Pregnancy associated pain with UTI was managed conservatively. In II Trimester: Of the 9 (27.3%) cases of Non-Obstetric pain abdomen, all were managed conservatively except 1 case of Gangrenous Cholecystitis that ended up in Lap Cholecystectomy. Of 2 (6.06%) cases of Pregnancy related causes, 1 of severe constipation and UTI each,were managed conservatively. Of the 6 (18.2%) cases of Gynecological causes of pain abdomen in pregnancy, 83.3% cases were conservatively managed with 1 case of pregnancy with endometrioma being taken up for Laparoscopic ovarian cystectomy. In III Trimester: Of the 7 cases (21.2%) of Non-Obstetric causes of pain abdomen, 6(85.7%) were managed conservatively with 1 case of combined renal colic and ureteric colic was managed surgically. 1 case of Gynecological cause of pain abdomen in pregnancy was well managed conservatively.

Conclusion: Though Acute Appendicitis is the commonest cause of Acute abdomen in pregnancy but our study encountered no such case. Most common cause in our study was Cholelithiasis and Acute cholecystitis. Preferred management modality was conservative with surgical option preferred in second Trimester.

[OP OBS 10]

Examining Caesarean Delivery Rates using the Robsons Ten Group Classification

Varsha Maran

Type: Original Articles

Objective: To examine ceaserean delivery rates based on the robsons ten group classification system(TGCS) over a ten year period.

Materials & Methods: All vaginal delivery and ceaserean sections performed over a ten year period from 2004-2013 were included in the analysis. The data were compiled according to Robsons TGCS of ceaserean section for every year. Risk ratio(crude RRs) with 95% confidence intervals for delivery by ceaserean section were calculated for each robsons group.

Results: The TGCS was easily applied in this large dataset of 40,086 deliveries. The 10-year overall cesarean section rate (CSR) was 25.17 %. Groups 1 and 3 represented 60 % of the total obstetric population. The largest contributions to the total CSR are group 1 (37.62 %) and group 5 (17.06 %). Group 3 which was the second largest group contributed 15 % to the overall CSR. Group 2 and group 4.

had high group CSRs of 47.28 and 34.74 % respectively, although the total group size was small (n = 1375;3.43 %). Maternal age and presentation were found to have an independent association with mode of delivery on logistic regession.

Conclusion: The Ten-group classification helped to identify the main groups of subjects who contribute most to the overall CSR. It also helped to identify subgroups requiring closer monitoring for more in-depth analyses of the indications for caesarean section. It is important to focus on the first four TGCS groups which constitute about 75 % of all deliveries. It is in the low-risk groups that one is likely to find the highest and most inappropriate indications for cesarean sections.

[OP OBS 11]

Aetiological Classification of Stillbirths: A case control study

Monika Chaudhary

Type: Original Articles

Objective: To determine etiology of stillbirths using the ReCoDe classification system.

Materials & Methods: This was a prospective case control study over a period of 1 year from September 1st, 2012 to August 31st, 2013. Sample size was calculated as 243 cases and 486 controls. Two controls (live births) per case were matched for gestational age and birth weight. Odd's ratios with 95 % confidence intervals were calcu- lated using multivariate logistic regression.

Results: Maternal age and parity that appeared to be highly significant factors on univariate analysis were not found to be independent risk factors with multivariate logistic regression. Gestational age and birth weight were not statistically significant risk factors. Other risk factors like previous stillbirth (26.13; 95 % CI 3.23–211.29), antepartum hemorrhage (11.63; 95 % CI 3.83–35.30), and hypertensive disorders (2.09; 95 % CI 1.20–3.63) were found to be highly significant independent risk factors. Major congenital anomaly (P.001), birth asphyxia (P = 0.0037), cord accidents (P = 0.0037), and rupture uterus (P = 0.001) were also highly significant.

Conclusion: The stillbirth rate was 87.83 per 1000 live births. The ReCoDe primary classification system enabled 74.1 % of the cases to be assigned a relevant condition, leaving only 25.9 % as unexplained. The single largest condition associated was fetal growth restriction (25.9 %).

[OP OBS 12]

Cervical Intraepithelial Neoplasia with Aggressive Tumor Biology with High Risk HPV Infection in Early Pregnancy - A rare case

Sahana Sreenivas

Type: Case Report

Objective: Although the incidence of cervical cancer in pregnancy is 1-10/10000 preganancies which is 3% of the total, the incidence of cervical intraepithelial neoplasia is 1.30-2.7/1000 pregnancies. Out of those patients who undergo pap smear 5-8% turns out to be abnormal. It is a diagnostic and managment dilema as, 10-70% of the cases regress & even disapper postpartum,while 25-47% persist & progression occurs in 3-30% cases.

Materials & Methods: In my case a 35yr old lady, G2A1 with 16weeks of gestation diagnosed to be high risk positive for HPV 16, came in with c/o spotting pv. On p/s examination showed multiple small polyps over the cervix. Pap smear showed ASCUS. Hence proceeded with colposcopy and ZED scan guided biopsy after a month which showed CIN 2/CIN 3.

Results: Considering the high risk factors & rapidly progressive cervical intraepithelial neoplasia LLETZ at 18weeks and was regularly followed up with LBC pap every 4 weeks. She had a spontaneous vaginal delivery at 38 weeks and LBC pap done 6 weeks postpartum showed negative for malignancy/ intraepithelial lesion.

Conclusion: Although CIN is rare in pregnancy early diagnosis is crucial for the management. Given the increasing incidence of CIN in young women, the beginning of pregnancy may represent a peculiar opportunity for all pregnant women who do not take part in cervical screening programs to undergo a cytocolposcopic examination. Patients who experience vaginal bleeding during pregnancy should be screening for cervical cancer & speculum examination should definitely be performed in these patients. Contrary to some studies which suggested excision before 16weeks, excision done after 16weeks dont have any ill outcome on pregnancy according to few studies

[OP OBS 13]

To Make Aware The Clinician The Rare Presentation of Asymptomatic Severe Endometriosis (grade 4)

Varun Khandelwal

Type: Case Report

Objective: To make aware the clinician the rare presentation of asymptomatic severe endometriosis (grade 4).

Materials & Methods: Details of the case with through history, examination and intra -operative findings along with pictures from the operative procedure.

History: 25 year old primigravida with 9 months of amneorrhea came to Bharati Hospital, Pune, for routine antenatal check up. Her menarche was at 13 years, past menstrual periods were regular, no complaints. She conceived spontaneously with in two months of marriage and was admitted in view of planned elective lower segment caesarean section in view of cephalopelvic disproportion examniation: full term uterus, relaxed, fetal heart sounds regular, cephalic presentation. Patient taken for elective caesarean section

Results: Intraoperatively, cystic ovaries with dense adhesions were present between bowel, ommentum, fallopian tubes and bilateral ovaries. Hence after delivery of baby, uterus was exteriorized and large dark brown endometriotic patches were seen on posterior surface of uterus and uterosacral ligaments. Pouch of Douglas was obliterated. Clinical diagnosis: grade 4 endometriosis

Conclusion: Endometriosis remains an enigma in its presentation. Accurate and timely diagnosis is associated with confusion. Rarely, as in this case, patient may even conceive spontaneously, with no symptoms / signs or complications of endometriosis

[OP OBS 14]

Acute Disseminated Encephalomyelitis: A rare complication of Varicella Zoster infection in a pregnant women

Taruna Sharma

Type: Case Report

Objective: Incidence of varicella in pregnancy is calculated to be 2-3/1000 pregnancy. Although varicella infection is self limiting benign disease, occasionaly it may cause complications. Neurological complications caused by chickenpox are estimated as approximately 0.01%-0.03%.

Materials & Methods: A 28 year old G3P2L1 presented at 15 weeks of gestation with weakness of bilateral lower limbs & urine incontinence. It was preceded by fever and vesicular skin eruptions. IgM for varicella zoster was positive. Diagnosis of post varicella ADEM (Acute disseminated encephalomyelitis was made.Patient also developed grade 3 bed sore for which skin grafting was done. Patient was managed by multidisciplinary team.

Results: Patient responded to acyclovir, steroids & immunoglobulins & made full neurological recovery.

Conclusion: Acute disseminated encephalomyelitis (ADEM) is a demylenating disease of brain & spinal cord of acute onset usually occurs after viral infections. Its occurrence is very rare following varicella zoster infection.

[OP OBS 15]

Role of Internal Iliac Artery Embolization in Control of PPH

Nirupama Sakhadeo

Type: Case Series

Objective: To study role of internal iliac artery embolization in control of PPH

Materials & Methods: 20 patients managed in Aster Adhar Hospital, Kolhapur Maharashtra, by doing internal iliac artery embolization.

Results: It showed 90% success, 18 patients recovered completely, two patients could not be cured due to coagulation failure and multiorgan failure respectively.

Conclusion: Internal iliac embolization is effective way to control primary or secondary PPH.

[OP OBS 16]

A Study of Maternal Risk Factors in Preterm Labour and PPROM and Their Neonatal Outcomes

Ankita Jain

Type: Original Articles

Objective: 1. To study the maternal risk factors of preterm labour and PPROM 2. To study neonatal outcomes in these.

Materials & Methods: This study was conducted on 70 women admitted in Apollo Hospital due to PTL/PPROM (group I) and 30 mothers of outborn preterm babies admitted in NICU (group II). They were evaluated for risk factors and neonatal outcome was followed till discharge.

Results: The prevalence of PTL/PPROM was 20.7%. The significant maternal risk factors for PTL and PPROM were unbooked status (27.1% in group I, 100% group II), history of prior PTB (41.67% group I, 29.41% group II), associated medical comorbidity - maternal anae.

Conclusion: Preterm labour and PPROM can be prevented by antenatal care, early diagnosis and treatment of maternal anaemia, associated comorbidities and infection. If delivery is imminent, such high risk pregnancies should be referred in-utero to a tertiary care cent.

[OP OBS 17]

Sublingual Misoprostol as an Adjunct to Oxytocin During Cesarean Delivery in Women at Risk of Postpartum Hemorrhage

Dr Shabnum Ara

Type: Original Articles

Objective: To assess the efficacy of sublingual misoprostol as an adjunct to parenteral oxytocin in preventing blood loss during and after surgery in patients with high risk for postpartum hemorrhage.

Materials & Methods: One hundred seventy-five women who were high risk for postpartum hemorrhage and undergoing emergency cesarean delivery were assigned randomly to receive either 400 ?g misoprostol or placebo sublingually at the time of cord clamping. All participants received an intravenous infusion of 20 units of oxytocin. The primary outcome measures were intraoperative and postoperative blood loss.

Results: Mean intraoperative blood loss was significantly less in misoprostol group as compared with placebo group (595 ± 108 vs. 651 ± 118 ml, P = 0.025). Perioperative Hb fall was significantly less in misoprostol group (0.87 ± 0.29 vs. 1.01 ± 0.26 g, P = 0.0018).

Conclusion: Misoprostol as an adjunct to oxytocin is more efficient in preventing blood loss as compared to oxytocin alone.

[OP OBS 18]

Foetal Adrenal Gland Volume a Novel Predictor of Onset of Labour

Dr Sapna Vinit Amin

Type: Original Articles

Introduction: There is a definite need to find a highly sensitive and specific, non-invasive and cost-effective marker for prediction of preterm labour. As the psychosocial structure of the society is changing, we find an increased number of women who are interested in prediction of spontaneous onset of labour, even at term. We hypothesize that a measurement of adrenal gland volume can predict a preterm as well as a term labour with same efficacy as the final mechanism and 'placental-clock' theory holds good for both.

Material and Methods: Two hundred and sixty eight (268) pregnant women were enrolled in the study at 28 to 34 weeks' antenatal visit. After exclusion of 64 women during the follow up, 204 were included in the final analysis. All of them were subjected to 2D ultrasonographic measurement of the corrected foetal adrenal gland volume (cFAGV) and foetal adrenal zone parameters including the width ratio and depth ratio. Additionally, a trans-vaginal ultrasonographic cervical length (CL) measurement was done. The cohort was followed up to term and a reassessment of cFAGV and foetal adrenal zone parameters was repeated between 37 to 39 weeks. Women who presented with features of preterm labour had a scan at the

time of presentation to record cFAGV and foetal adrenal zone parameters.

Results: Women who developed features of preterm labour eventually, had a significantly high cFAGV (404.70 mm3/kg body weight) during the first scan compared to those who reached term asymptomatically (241.35 mm3/kg body weight). A cut off value of 271.16 mm3/Kg body weight showed 90% sensitivity and 81.9% specificity in predicting women who are at risk for developing features of preterm labour. Foetal adrenal gland width ratio had the best efficacy (sensitivity: 96.67%, specificity: 86.2%) followed by cFAGV (sensitivity: 96.67%, specificity: 83%) for predicting preterm delivery. We also found a statistically significant difference in cFAGV among those who delivered spontaneously (393.05 mm3/kg body weight) versus those who had to be induced (290.92 mm3/kg).

Conclusion: 2D ultrasound measurement of foetal adrenal gland parameters (foetal adrenal gland width ratio and cFAGV) can be used as a marker for prediction of preterm delivery. cFAGV at term can also be used to predict the possibility of spontaneous onset of labour.

[OP OBS 19]

Neuraxial Anaesthesia during Labor: Experience in our hospital

Dr Niharika Thakur

Type: Original Articles

Objective: Providing analgesia during labor has been marred with challenges, more so because of the myths and controversies surrounding labor. Neuraxial analgesia is considered to be the gold standard of pain relief during labor. In this review, we have attempted to document our experience with Neuraxial analgesia in labouring patiens, in terms of the delivery outcome and how variables like the patient selection and timing of anaesthesia affect the overall course of labor and delivery outcome after administration. An evaluation of adverse outcomes including prolonged labor, need for assisted vaginal delivery, fetal distress and need for cesarean delivery has also been made.

Materials & Methods: We administered Neuraxial analgesia in 53 labouring patients in our hospital over eight months (December '17 to July '18) including 46 primigravidas, and 7 second gravidas (including one patient undergoing TOLAC) and evaluated the above mentioned factors and outcomes in them.

Results: 30 primigravidas and all secondgravidas with previous vaginal delivery(6 in number) went on to deliver vaginally. 16 primigravidas, and the patient undergoing TOLAC underwent LSCS.

Conclusion: We found, in conclusion, that not only proper patient selection and timing resulted in favourable delivery outcomes, but administration was very effective and safe for both the mother and the baby.

PRIZE CATEOGARY

Dr S K Ghai Bhandari Award for Preventive Care in Obstetrics and Gynaecology

[OP PC 1]

Retrospective Analysis of Cause of Stillbirth in Previous Pregnancy: Study from a tertiary care government hospital in North India

Shruti Jain

Type: Original Articles

Objective: To analyse the cause of stillbirth in previous pregnancies and to identify preventable factors of stillbirth in pregnant women from a tertiary care centre in North India.

Materials & Methods: All consecutive patients with a history of stillbirth in previous pregnancies attending the antenatal clinic of Maternal and Reproductive Health Department, SGPGIMS, Lucknow, from September 2015 to May 2017 were recruited. A detailed history and examination were recorded in a structured proforma. A total of 113 pregnancies of 94 consecutive women were analysed.

Results: Of 113 pregnancies analysed, 88% were supervised. A cause of stillbirth was identified in 96 (85%) pregnancies. Intrapartum adverse events (rupture uterus, abruptio placentae, fetal distress, cord prolapse) were identified as cause in 16 (14.2%) pregnancies. Medical disorders in pregnancy accounted for 30 (26.5%) cases and included hypertensive disorders of pregnancy 14 (12.4%), gestational diabetes mellitus 13 (11.5%) and intrahepatic cholestatasis of pregnancy 3 (2.6%). Intrauterine fetal growth restriction and oligohydramnios caused 16 (14.2%) stillbirths. Rh alloimmunization was responsible in 12 (10.6%) cases. Fetal congenital malformations (neural tube defects, jejuna atresia, ascites) led to 22 (19.5%) stillbirths. 13 patients had previous 2 stillbirths, most common cause identified was uncontrolled diabetes. 2 patients had previous 3 stillbirths attributed to Rh isoimmunisation and in other case cause could not be identified.

Conclusion: 65% of stillbirths were attributed to preventable causes and could have been prevented by better pregnancy supervision. It indicates need to improve antenatal care with emphasis on aggressive management of medical disorders in pregnancy and better intrapartum care.

[OP PC 2]

Stillbirth: Is it preventable?

Sparsha

Type: Original Articles

Objective: An estimated 2·6 million third trimester stillbirths occurred in 2015. The number of stillbirths has reduced more slowly as compared to maternal mortality or mortality in children younger than 5 years, which were targeted in the Millennium Development Goals. The Every Newborn Action Plan has the target of 12 or fewer stillbirths per 1000 births in every country by 2030. Many disorders associated with stillbirths are potentially modifiable. So it is necessary to recognize those factors and reduce the number of stillbirths. So, Our aim is to study the various modifiable risk factors and their role in reducing burden of stillbirth.

Materials & Methods: We have done a retrospective study of all stillbirth in 1 year from October 2015-October 2017 in Lok Nayak Hospital, Delhi to find out the various risk factors associated with stillbirths in 2 years and to study their impact on rate of stillbirth.

Results: Maternal disorders and maternal complications occur during pregnancy and delivery such as pre-eclampsia, diabetes, anemia, obstructed labor, or previous stillbirth or neonatal death, Post-term pregnancy, Maternal infections in pregnancy (malaria, syphilis and HIV), Fetal growth restriction, Congenital abnormalities. Nearly about half of the stillbirths occur due to causes like gestational hypertension, gestational diabetes, anemia, maternal infections, fetal growth restriction which should be minimized to reduce the burden of stillbirths.

Conclusion: Identification of various modifiable risk factors could effectively contribute towards reducing the unacceptably high burden of stillbirth in developing countries.

[OP PC 3]

Efficacy of Betadine Vaginal Toileting before Cesarean Section in Postoperative Infections

Tarang Preet Kaur

Type: Original Articles

Objective: To evaluate the efficacy of preoperative betadine vaginal toileting in reducing post caesarean infections (endometritis, febrile illness, wound sepsis)

Materials & Methods: This prospective longitudinal study was conducted at Maulana Azad Medical College, New Delhi over 3 months among 200 women who underwent caesarean delivery. Inclusion criteria were defined as women undergoing caesarean section. Exclusion criteria included placenta previa, active genital herpes, cord prolapse, chorioamnionitis, allergy to iodine. After taking informed consent, subjects were divided into two groups by simple randomisation method using computer generated random numbers

Group 1 (case): Subjects who underwent 5% povidone iodine sponge stick cleansing in all the fornices and walls of vagina for 30 seconds after foley's catheter insertion and before abdominal scrubbing.

Group 2 (control): Subjects who didn't receive betadine vaginal toileting before caesarean section. Subjects were followed for 10 days postpartum (or till suture removal/ discharge from hospital, whichever was late). Demographic data, operative details and postoperative parameters were compared between the two groups.

Results: Both groups were matched for baseline patients' characteristics (age, BMI, gestational age, operative time). Women who received preoperative betadine vaginal toileting had markedly less incidence of endometritis (case-3%, control-10%, $p<0.05$). Incidence of postoperative febrile illness (case-6%, control-12%, $p>0.05$) and wound sepsis (case-5%, control-12%, $p>0.05$) were found to be less but not significant between both groups.

Conclusion: Preoperative vaginal cleansing helps in reducing postoperative morbidity by decreasing incidence of postoperative infection.

PRIZE CATEOGARY
Dr Sheila Mehra Endoscopy Award

[OP E 1]

Scar Ectopic Pregnancy: Successful endoscopic management

Deepika Singh

Type: Case Report

Objective: Scar ectopic pregnancy (SEP) is the rarest type of ectopic pregnancy where the trophoblast implants on previous uterine scar. It is associated with severe complications such as uterine rupture, uncontrollable bleeding and emergency hysterectomy. SEP is rising in frequency because of increasing number of uterine surgeries and incidence has been reported to be 1:2000 in literature. We describe 2 unique cases seen over a span of 3 months at Fortis Hospital, Gurgaon.

Materials & Methods: Case 1: G4P2L2A1 with previous one CS presented with profuse bleeding per vaginum post surgical MTP (for 2 months amenorrhoea). She was diagnosed to have SEP on USG done for failed MTP. MRI showed impending rupture with no free fluid in abdomen. She was hemodynamically stabilised, inj. Methotrexate 60 mg intramuscular was given followed by successful Hysteroscopic removal of POCs under laparoscopic guidance after 24 hours.

Case 2: G4P2L2A1 with previous 2 CS presented at 6+4 weeks POG with SEP on routine antenatal USG. As she was hemodynamically stable, inj. Methotrexate 60 mg was given followed by successful Hysteroscopic removal of POCs under laparoscopic guidance after 24 hours.

Results: Despite differing presentations, the two cases had some similarities. Previous CS scar was intact in both of them, both opted for tubal ligation (as fertility was not an issue). Serial b-hcg monitoring was done- showing normal declining trend. Both recovered uneventfully and are currently having normal regular cycles.

Conclusion: Early diagnosis and management of SEP is essential to prevent maternal morbidity and mortality, complications of emergency hysterectomy and blood transfusion. Intramuscular Inj. Methotrexate followed by Hysteroscopic removal of POCs under laparoscopic guidance was successful in both the cases and may become the standard of care as such cases are on the rise.

[OP E 2]

Managing Pelvic Adhesions in TLH : Tricks and techniques

Latika Chawla

Type: Original Articles

Objective: To analyze different types of pelvic adhesions and techniques used in laparoscopic adhesiolysis during TLH (Total Laparoscopic Hysterectomy).

Materials & Methods: Pelvic adhesions caused by previous surgeries and conditions like endometriosis and pelvic infections can increase the risk of vital organ injury during dissection. Various techniques like lateral window technique for bladder adhesiolysis, retrograde dissection in frozen pelvis etc. can be used to reduce this risk.

Conclusion: Using correct techniques can reduce the risk of vital organ injury in laparoscopic pelvic adhesiolysis. Prevention of these adhesions forms an important role in management.

[OP E 3]

Minimally Invasive Management of Placenta Accrete Syndromes

Pakhee Aggarwal

Type: Case Report

Objective: Placenta accrete syndromes (PAS) stand for the composite term used to describe abnormal placental implantation and adherence and are classified into placenta accreta, increta and percreta according to depth of placental ingrowth into uterine wall. PAS have evolved into one of the most serious problems in obstetrics. Related to the increasing caesarean deliveries, frequency of PAS has reached seemingly epidemic proportions. Relative proportions of placenta accreta, increta and percreta is 80: 15:5 respectively. There is no consensus for its management which ranges from least invasive endoscopic methods to emergency peripartum hysterectomy. PAS contribute ~ 15% to maternal deaths from obstetrical haemorrhage. Incidence is 1:553. We describe two cases of PAS, with differing presentations which were managed using similar minimally invasive approach.

Materials & Methods: Case 1: P2L2A2 with previous 2 LSCS with known case of placenta percreta came to FMRI OPD with heavy bleeding per vaginum and pain abdomen. Elective LSCS was done at an outside hospital and placenta was left in situ followed by 2 doses of Inj. Methotrexate 60 mg intramuscular given post operatively. USG showed 7.2 x 4.5 cm placenta percreta in lower uterine segment upto 4 mm from serosa. MRI showed 7x 6 cm placenta percreta with focal 9 mm out pouching in region of LSCS scar. Patient was very keen for conservative management to preserve the uterus. Hysteroscopic removal of retained placenta percreta under laparoscopic guidance was done after 2 months of LSCS. ~ 2 cm outpouching from endometrial cavity on anterolateral LUS was there, walled off by serosa and omentum. > 90 % placenta was removed with resectoscope. 1 unit PRBC was transfused and Inj methotrexate 60 mg intramuscular was given once post operatively.

Case 2: G1 with uneventful antenatal period with no prior evidence of PAS on any of the routine antenatal USGs had NVD followed by retained placenta at FMRI. MRP was attempted under GA in OT, but failed. She was diagnosed with placenta increta with thinned out myometrium on MRI. Inj. Methotrexate 60 mg im 2 doses were given followed by laparocopy guided Hysteroscopic resection of retained placenta increta after 27 days of delivery. There was 10 x 12 cm right horn sacculation with thinned out myometrium and dilated vessels on the surface. ~ 50 % of the placenta was removed.3 units of PRBC were transfused post operatively. Inj. Methotrexate one dose 60 mg im was also given post operatively. USG guided Hysteroscopic removal of retained placenta increta was done after 20 days of first procedure and two big chunks of placenta were removed. Check hysteroscopy done post procedure confirmed cavity to be empty and intact. Placental tissue retrieved, was sent for histopathology examination and culture and sensitivity which was reported as - necrotic placental bits with calcification and sterile.

Conclusion: PAS is a potentially life threatening condition for mother that can be managed successfully using minimally invasive techniques and judicious patient counselling.

PRIZE CATEOGARY

Dr Nirmala Agarwal Reproductive Medicine Prize

[OP RM 1]

Clinical Outcome of Post Placental Copper T380A and Copper 375 IUCD Insertion in Women Delivering by Caesarean Section

Divya

Type: Original Articles

Objective: To compare the clinical outcome (safety, efficacy, expulsion and continuation rates) of post placental insertion of Cu375 and CuT380A intrauterine contraceptive devices (IUCD) in primiparous women undergoing caesarean section.

Materials & Methods: This was a prospective, randomized comparative study in which 300 primiparous women were recruited. All these women had post placental intracaesarean insertion of CuT 380A or Cu375 IUCD. Follow up visits were scheduled at 1, 3 months, 6 month and 12 months.

Results: Mean age was 23.1 years. Visibility of strings increased in successive follow up visits and was visible in 97.1% of women at the end of one year and 72.3% in CuT380A IUCD users at 12 months. Menorrhagia was reported in 8.6% in Cu375 IUCD users and 10% in CuT380A IUCD users at the end of 1 year of follow up. There were only 10 expulsions of Cu375 IUCD and six that of CuT380A IUCD. Removal rate in was 7.3% in Cu375 users and 6.7% in CuT380A users. Overall 84.7% of the women were satisfied with the treatment and 60% to an extent that they would like to recommend it to others whereas 15.3% were not satisfied at all either due to adverse events or spontaneous expulsion of IUCD.

Conclusion: The Gross cumulative continuation rates was 86% in women with Cu375 IUCD insertions and 89.3% in CuT380A IUCD users. There was no significant difference between Cu375 and CuT380A regarding the safety, efficacy and complications.

[OP RM 2]

Intracytoplasmic Sperm Injection with assisted Oocyte Activation Resulting in Successful Pregnancies and Live Birth in Couples with Globozoopsermia

Puneet K Kochhar

Type: Case Series

Objective: Globozoospermia, characterized by round-headed acrosomeless sperm, is a rare and severe form of teratozoospermia, which was previously considered a sterilising pathology. The present study included cases of globospermia where IVF-ICSI results were studied with and without oocyte activation following ICSI.

Materials & Methods: We report a successful pregnancy in two cases of total globozoospermia after intracytoplasmic sperm injection (ICSI) with oocyte activation with calcium ionophore.

Results: In the first case, globozoospermia was diagnosed on the day of oocyte retrieval. Among 11 retrieved oocytes, only one fertilized after ICSI. The pregnancy test 2 weeks after embryo transfer was negative. Two months later, the patient underwent

ovarian stimulation again. The 12 retrieved oocytes were exposed to calcium ionophore medium following ICSI. Four oocytes were fertilized and two blastocysts were transferred resulting in a clinical pregnancy. In the second case, among seven retrieved oocytes, three fertilized after ICSI and assisted oocyte activation, and two 8-cell embryos were transferred, resulting in a positive pregnancy.

Conclusion: Our report concludes that oocyte activation (with calcium ionophore) could improve the pregnancy rate significantly in cases with globozoospermia.

[OP RM 3]

Impact of Body Mass Index on the Outcome of In-vitro Fertilization Outcome in Indian PCOS Women

Sweta Gupta

Type: Original Articles

Objective: To study the effect of BMI on IVF-ICSI outcome in Indian PCOS women. The secondary aim of the study was to see the effect of BMI on oocyte and embryo development.

Materials & Methods: This was a retrospective study, done at Medicover fertility centre, Delhi between August 2017 to July 2018). A total of 87 PCOS women were included in the study. Exclusion criterias were age >35 years, basal FSH >12 IU/mL, AMH<3.5 ng/ml, severe male fac.

Results: There was no significant difference between age, AMH, E2 level on the day of triggerin the two groups. Women with higher BMI needed more number of days of stimulation when compared to women with normal BMI (P value 0.02). Even though, the dose of gonadotr

Conclusion: In comparison to previous studies, our study failed to show any effect of BMI on the clinical pregnancy rate in Indian PCOS women. There was also no correlation observed between BMI and AMH levels of PCOS women of Indian subcontinent. However, even after.

PRIZE CATEOGARY

Dr Asha Baxi Award for Miscellaneous Group Young Gynaecologist 40 and under

[OP MYG 1]

Successful Medical Management of Uterine Arterio-venous Malformation after Failed Uterine Artery Embolization: A rare case scenario

Preeti Yadav

Type: Case Report

Objective: Uterine arteriovenous malformation (AVM) is a rare cause of abnormal uterine bleeding. Uterine artery embolization is the treatment of choice for such a condition for patients who wish to preserve their fertility. Successful medical management of uterine AVM has been rarely described.

Materials & Methods: A 31 year old lady presented with abnormal uterine bleeding diagnosed to be secondary to a large AVM (4 x 2.7 cm) in the posterior uterine wall on ultrasongraphy. She underwent uterine artery embolization twice, only for the bleeding to recur again. The patient was started on injectable gonadotrophin releasing hormone (GnRH) analogue in the form of injectable leuprolide and oral progesterone. The patient responded to treatment and became asymptomatic with complete regression of the AVM on follow up ultrasonography.

Results: The present report describes a rare case scenario where uterine AVM was successfully managed with GnRH analogue after failed uterine artery embolization.

Conclusion: To conclude, medical therapy should be considered as an effective therapy for management of persistent uterine AVM before consideration of radical therapy in the form of hysterectomy.

[OP MYG 2]

A Case Series Study on Atypical Tubal Ectopic Pregnancies

Renuka Kumari

Type: Case Series

Objective: A case series study on atypical tubal ectopic pregnancies

Materials & Methods: I am presenting two cases where the patient presented in second trimester with acute abdomen and compensated shock which were managed by urgent laparotomy and per operatively found to have ruptured ampullary ectopic pregnancy at 18 and 16 weeks respective.

Results: Both the patients were managed by urgent laparotomy followed by salpingectomy along with resuscitative measures.

Conclusion: Ampullary ectopics, though, an unusual finding in second trimester, should be in mind when dealing with patients presenting with acute abdomen and shock even in second trimester of pregnancy.

PRIZE CATEOGARY

Dr Manjula Rohatagi and Dr Nirmala Vaze Award for Gynaecology Oncology

[OP GO 1]

m-RNA Expression of E-cadherin and Vimentin and p53 Immunohistochemistry in Epithelial Ovarian Cancer

Suman Chaudhary

Type: Original Articles

Format: Poster

Objective: Ovarian cancer is most lethal amongst all gynaecological cancers and poor survival is attributed to presentation in advanced stages. E-cadherin and Vimentin play an important role in malignant transformation and progression of epithelial ovarian cancer (EOC). Objective of this study was to correlate expression of epithelial mesenchymal transition (EMT) pathway markers i.e., E-cadherin and Vimentin with surgicopathological extent of EOC and to type the tumour using p53 immunohistochemistry staining.

Materials & Methods: This case control study included women with malignant and benign epithelial ovarian tumour. Sample size was calculated with 80% power and 5% level of significance and 22 cases (EOC) and 22 controls (benign ovarian tumour) were recruited. Intraoperatively, peritoneal spread of tumour was calculated by peritoneal carcinomatosis index (PCI), extent of tumour resection by completeness of cytoreductive score (CCS) and correlation derived. EOCs were typed into type I and type II by p53 IHC staining. m-RNA and protein expression of E-cadherin and Vimentin was done by real time polymerase chain reaction (RTPCR) and IHC staining respectively. Expression of p53, E-cadherin and Vimentin was correlated with surgicopathological staging.

Results: In advanced EOC, positive correlation was found between PCI and CCS with correlation coefficient of 0.495 and p-value < 0.0193. In cases with PCI less than 10 (n=10), CCS0 was achieved. p53 was expressed in 90.9% (n=10) high grade serous carcinoma and was not expressed in low grade serous carcinoma. m-RNA expression of E-cadherin was 2.126 times downregulated and of Vimentin 2.733 times upregulated in malignant as compared to benign epithelial ovarian tumour. Protein expression of E-cadherin was high in benign vs. EOC (p=0.387) and vimentin protein expression was overexpressed in EOC (p=0.007).

Conclusion: Intraoperative PCI accurately predicts completeness of cytoreduction. p53 can be used to differentiate high grade from low grade serous carcinoma. Expression of E-cadherin was decreased and Vimentin was increased in EOC which is in synchrony with EMT pathway. These insights into tumorigenesis and metastatic potential may ultimately lead to survival benefits and new drug targets.

[OP GO 2]

Ovarian cancer

Kavita Danodia

Type: Original Articles

Objective: To evaluate and compare the sensitivity and specificity of SI, CA-125 and Composite marker (i.e. patient has either a positive SI or positive CA-125) in detecting ovarian cancer. To evaluate Odd's ratio of each symptom variable in cancer detection.

Materials & Methods: This was a hospital based prospective case-control study. Participants included 90 healthy women at high risk for disease and 45 ovarian cancer patients. Patients with benign and borderline ovarian neoplasm were excluded. Sensitivity, specificity of SI, CA-125 and composite marker was calculated along with 95% confidence interval.

Results: Symptom index had 78% sensitivity and 88% specificity for predicting ovarian cancer. Abdominal pain was most prevalent symptom with a sensitivity of 84%. Most of the symptoms appeared within three months of diagnosis of cancer.

Conclusion: Symptom index is cost effective, causes minimal discomfort and can identify women for further investigations such as CA 125 and Trans-vaginal ultrasound, as the first level in multistep screening programme for ovarian cancer detection in general population.

[OP GO 3]

Vulvar Dermatofibrosarcoma Protuberans: A rare case with a broad differential diagnosis

Vartika Srivastava

Type: Case Report

Objective: To present an extremely rare case of dermatofibrosarcoma protuberans of vulva, initially misdiagnosed as angiomyxoma, in view of its rarity and associated diagnostic and therapeutic implications.

Materials & Methods: Dermatofibrosarcoma protuberans of vulvar region is an extremely rare and often misdiagnosed neoplasm in gynaecological oncology. It is a malignant aggressive dermal mesenchymal tumor, with fewer than 50 cases reported in the world literature till date.

A 47-year-old P3L3 presented with a recurrent, large, nodular, cauliflower like growth on right mons pubis. CT scan was suggestive of atypical hemangioma. While, biopsy rendered a provisional diagnosis of angiomyxoma. Keeping the aforementioned diagnosis in mind, local excision was performed and final histopathology with CD34 positive immunohistochemical analysis proved it to be a rare case of dermatofibrosarcoma protuberans.

Results: The patient continued to be tumor free and had no lymphadenopathy. Her wound exhibited an excellent cosmetic and functional outcome, with no evidence of deformity of the vulva.

Conclusion: This case motivated us to review the most important aspects of this rare tumor, besides presenting an interesting and typical case of dermatofibrosarcoma protuberans which was misdiagnosed as angiomyxoma prior to surgery. It is a tumor to watch out for when dealing with soft tissue tumor as many a times its benign appearance may alter the diagnosis. Regardless being a very rare disease, it represents a very challenging situation for the oncologic surgeons.

[OP GO 4]

Incidence of Uterine Sarcoma in Women presenting with AUB with Pelvic Mass in Rural Population of Chhattisgarh

Meena Naik

Type: Original Articles

Objective: Uterine sarcomas are rare malignant tumors arising from the smooth muscles of the wall of uterus. Uterine leiomyosarcomas present usually as AUB. Other symptoms may vary according to size and location of tumor like pressure symptoms, bladder bowel symptoms, pain. This was a retrospective observational study to find incidence of uterine sarcomas in women presenting with AUB and pelvic masses with mosty likely diagnosis of fibroid uterus.

Materials & Methods: This was a retrospective study conducted at CCM medical college hospital, Durg. 515 patients operated for AUB with presumed diagnosis of myoma /pelvic mass over a period of 2 years from October 2014 to November 2016 were studied and. This included both myomectomy and hysterectomy. Postoperative histopathological reports were

reviewed and incidence of sarcomas (leiomyosarcoma and endometrial stromal sarcoma) was studied among the total patients operated for AUB and pelvic mass.

Results: Out of 515 patients operated with diagnosis of a presumed benign uterine tumour presenting with AUB, 6 patients were found to have uterine sarcoma after histopathological examination. Out of these 6 patients 4 patients had leiomyosarcoma and one had endometrial stromal sarcoma and one had mixed misodermal tumour all women had pre-op evaluation with D & C, usg, none had shown malignancy. Intra-op suspicion was there in 2 patients. In our study the incidence of sarcoma was found to be 1.16% in patients operated for benign pelvic tumours presenting with AUB. Reason of this high incidence is unclear it may be because most of our patients had large tumours 20% patients in our study had large mass >16 weeks. And most of our patients were 40 +age group Age group of our patients ranged from 23-70 years.

Conclusion: uterine sarcoma should be kept in mind in dealing with any patient presenting with AUB and uterine mass as there is no preoperative test that can conclusively diagnose sarcoma in a uterine mass clinicians should keep in mind and remain vigilant and they should counsel the women appropriately. while offering conservative treatment options about the chances of sarcoma in a uterine mass with AUB and also while performing laparoscopic surgery with morcellation.

PRIZE CATEOGARY
Dr Urvashi P Jha Gynaecology Prize

[OP G 1]

Abdominal Wall Endometriosis after Caesarean Section: A preventable complication

Parul Bhugra

Type: Case Report

Objective: To present a case of abdominal wall endometriosis after caesarean section, discuss its management and steps to prevent its complication.

Materials & Methods: The diagnosis was suspected on the basis of clinical presentation. Fine needle aspiration cytology (FNAC) helped to make preoperative diagnosis. Wide local excision of the lesion was done under spinal anaesthesia.

Results: The histopathological examination of the lesion confirmed the diagnosis. Presently the patient is on regular follow up (with no evidence of recurrence).

Conclusion: Abdominal wall endometriosis should be considered in the differential diagnosis when a woman presented with a painful swelling in the abdominal scar after a history of caesarean section. Good technique and good care during cesarean section my help in preventing this complication.

[OP G 2]

Management of Unilateral Kidney with Hydroureteronephrosis in a Case of MRKH

Arpita De

Type: Case Report

Objective: Mayer-Rokitansky-Kuster-Hauser (MRKH) syndrome, Type 2 is a form of mullerian agenesis typically associated with renal, skeletal, cardiac and ovarian abnormalities. MRKH is rare with an incidence of 1 in 5000 in general population and Type 2 is rarer. When there is a single kidney and that gets affected by hydroureteronephrosis the management becomes very tricky. This case report discusses the difficulties and surgical principles in treatment of such a rare case of MRKH with single kidney and ureteric fibrosis.

Materials & Methods: Case Report: We report the case of a 13yr old young girl presenting with primary amenorrhoea and severe right sided flank pain since the last two months. On examination and investigations she was diagnosed with MRKH Type 2 with vaginal, unilateral kidney and unilateral gonadal agenesis. The solitary kidney had hydrureteronephrosis. A laparotomy was planned with an experienced urosurgeon. There was a small hypoplastic uterus. Hysterectomy was done. In the retroperitoneum, the ureter was markedly dilated to almost 3 cm and was found to be surrounded by fibrosis from beyond the pelvic brim to just proximal to the bladder. Ureterolysis was done. It was followed by reimplantation of the freed ureter into the bladder along with a psoas hitch and omental patch. DJ stents was put and kept for 7 weeks. Vaginoplasty was planned for later, prior to her marriage. Histopathology from the ureteric obstruction site showed fibrosis. An ultrasound at six months confirmed resolution of the hydroureteronephrosis of the solitary kidney.

Results: There are very few cases in the literature with MRKH Type 2 and solitary kidney affected in hydroureteronephrosis. Skilled urosurgeons have done complicated procedures like ureterolysis and reimplantation into the bladder, pyeloplasty and ureteric switch procedures. The highlights of this surgery was careful ureterolysis sothat blood supply is not compromised. Biopsy from the site of obstruction is important. The ureters should be reimplanted laterally into the bladder along with a psoas hitch. Intraperitonealisation with an omental patch is vital.

Conclusion: Single kidney affected with hydrouretronephrosis makes the management very tricky. A skilled urosurgeon should operate such cases. After any ureteroplasty a repeat IVP or ultrasound should be done to confirm resolution of hydroureteronephrosis and rule out chronic nonfunctioning kidney resulting from failed surgery.

[OP G 3]

Estimation of the 10-year Probability of Osteoporotic Fracture in Postmenopausal Indian Women with FRAX Score

Ruchi Joshi

Type: Original Articles

Objective: As the proportion of the aging population rises dramatically, osteoporotic fractures among the elderly have

become a global health concern. We assessed the prevalence of osteoporosis and estimated the 10-year probability of osteoporotic fractures among postmenopausal women.

Materials & Methods: This pilot study was conducted on 30 post menopausal women attending Gynecology OPD of MGM Medical college and MYH Indore. WHO recommended questionnare was filled & diagnosis of osteoporosis was made according to World Health Organization (WHO) criteria. The 10-year probability of osteoporotic fracture was computed online with the WHO Fracture Risk Assessment Tool (FRAX)

Results: In total, 60 postmenopausal women were involved in this study. The mean 10-year probabilities of a major osteoporotic fracture was 16.7% and hip fracture was 13.33% respectively. The major risk factors contributing to higher risk of osteoporosis included history of previous fracture, history of rhematoid arthritis, history of glucocorticoids or steroids use. The estimated 10-year probability of osteoporotic fracture also increased with increasing age.

Conclusion: Risk of osteoporotic fracture is of great concern particularly among older women and vegetarians. Ongoing studies of fracture rates should be followed up, and strategies and research directed at fracture prevention should be prioritized as the proportion of the aged population increases.

[OP G 4]

A Study of Insulin Resistance in PCOS Women

Geethanjali G

Type: Original Articles

Objective: To identify relative Hyperinsulinemia and HOMA-IR in PCOS women diagnosed with Rotterdam criteria and compare with normally ovulating women

Materials & Methods: Design - Observational study. Hindu Rao Hospital. 40 normally ovulating women and 40 PCOS women Intervention- Fasting serum obtained from women of both the group and evaluated for glucose, insulin and HOma-IR was calculated.

Results: The Fasting insulin, glucose HOMA-IR was significantly higher in PCOS women compared to normally ovulating women (p value 0.009, 0.000, 0.005 respectively)

Conclusion: Higher level of insulin and HOMA-IR in PCOS women may predispose type 2 DM among PCOS women

[OP G 5]

Ohvira Syndrome (obstructed hemivagina and ipsilateral renal agenesis) with Uterus Didelphys: A case report

Khushboo Malhotra

Type: Case Report

Objective: Obstructed hemivagina and ipsilateral renal anomaly (OHVIRA) or Herlyn-Werner-Wunderlich syndrome, is a rare Mullerian duct anomaly with uterus didelphys, unilateral obstructed hemivagina, and ipsilateral renal agenesis. Patients with this anomaly usually presents after menarche with pelvic pain and/or a mass and rarely, in later years, with primary infertility. Strong suspicion and knowledge of this anomaly are essential for a precise diagnosis.

Materials & Methods: A 30 years old nulliparous female with married life of 2 years presented with complaints of vaginal discharge since 1½ years with dysmenorrhoea since menarche with primary infertility. On further clinical, radiological and laparoscopic evaluation patient was diagnosed with OHVIRA syndrome with uterus didelphys. Patient underwent laparotomy in which excision of right hypoplastic uterus was done with pus drainage from ipsilateral blind vaginal pouch.

Results: OHVIRA syndrome should be considered among the differential diagnosis in young females with renal anomalies presenting with chronic vaginal discharge, vaginal swelling, pelvic mass, symptoms of acute abdomen, acute urinary retention and primary infertility.

Conclusion: OHVIRA syndrome should be considered among the differential diagnosis in young females with renal anomalies presenting with chronic vaginal discharge, vaginal swelling, pelvic mass, symptoms of acute abdomen, acute urinary retention and primary infertility.

[OP G 6]

Aggressive Angiomyxoma

Devi krishna, Mayadevi Kurup, Surya Jayaram

Type: Case Report

Objective: Aggressive angiomyxoma is a mesenchymal tumour which is locally invasive and seen in women of reproductive age group. We present a case of 46-year-old post hysterectomy lady with swelling in left side of vulva.

Materials & Methods: Case Report: Aggressive angiomyxoma with CD 34, Desmin, SMA and ER Positive in tumour cells. There were no conspicuous mitosis or necrosis.

Conclusion: The first line of therapy for aggressive angiomyxoma is surgery, although achieving negative resection margins is difficult because of the infiltrative nature of the tumour and the absence of a defined capsule. Smaller, more-superficial tumours of the vulva or vagina may be removed with wide, local excision, but larger, deep-seated tumours of the pelvis may require more extensive surgery with partial or complete resection of some pelvic organs, conferring a higher risk of morbidity.

[OP G 7]

Ovarian Malignancy in Pregnancy

Deepti Pachauri

Type: Case Report

Format: Oral

Objective: Mucinous cystadenocarcinoma in pregnancy : A case report

Materials & Methods: 22 years female with G2P1L0 with 18+6 weeks POG came in routine ANC clinic with ultrasound Doppler report of suspected right ovarian malignant cyst. After thorough evaluation patient underwent stating laparotomy followed by right salpingooophorectomy. Histopathological report came out to be grade 1 mucinous cystadenocarcinoma with omental and peritoneal tissue free of tumor deposits.

Pregnancy continued with patient's consent and was started on chemotherapy after consulting medical oncologist.

Results: Early findings of ascitis by ultrasound and persistent large ovarian mass during pregnancy may be related to malignancy and advanced stage. Chemotherapy is not contraindicated during the second or third trimester but the choice of couple must be contraindicated.

Conclusion: Pregnancy women in advanced stage of ovarian cancer seem to poor prognosis.

PRIZE CATEOGARY

Dr Ranjana Sharma Urogynaecology Prize

[OP U 1]

Clinical Profile, Surgical Approach and Outcomes of Complicated Genital Fistulae in Urban Population of a Developing Nation

Preeti Yadav

Type: Original Articles

Objective: To study etiology and management of complicated genital fistulae and to evaluate the outcome of reparative surgery.

Materials & Methods: The prospective observational study enrolled patients undergoing reparative surgery for complicated genital fistulae from September 2006 to August 2017 at Sant Parmanand Hospital, Delhi. All patients underwent a reparative surgery after a detailed preoperative workup. All surgeries were done successfully using a transperitoneal approach. Patients were followed up clinically for the assessment of outcomes.

Results: A total of 12 patients were recruited. 7 (58%) patients had fistulae secondary to gynaecological surgeries (5 laparoscopic and 2 abdominal hysterectomies) and 5 (42%) patients had obstetric fistulae. At a mean follow up of 3.9 years among obstetric fistulae and 5.8 years among post-operative fistulae, 100% success rate was maintained with first attempt of reparative surgery. There were no major complications. 2 patients had recurrent urinary tract infections and 1 patient had transient urinary incontinence for 4 weeks.

Conclusion: The study demonstrates that complicated genital fistulae occur more commonly secondary to gynaecological surgeries as compared to obstetric complications in a contemporary cohort from a metropolitan city. A 100% success rate of reparative surgery could be achieved with a transperitoneal approach, with no recurrence or major complications being reported.

PRIZE CATEOGARY

Dr Shrimati Krishna Nadda Memorial Award for Miscellaneous / Obstetrics for PG Students

[OP M 1]

A Comparative Study of Anti Mullerian Hormone in PCOS and Normally Ovulating Women

Geethanjali G

Type: Original Articles

Objective: To compare Anti mullerian Hormone (AMH) level in PCOS women with normally ovulating women and to study its relationship with clinical parameters, ultrasonological morphology and other hormonal levels in these women.

Materials & Methods: Design - observational study. Setting –Hindu Rao Hospital and NDMC Medical College. Patients - 40 PCOS and 40 normally ovulating women attending Gynae OPD. Intervention - After taking history, examination and ultrasonological evaluation was done in both the groups (PCOS and normally ovulating women) and a fasting sample was tested for serum AMH, androgens, SHBG, LH, FSH and estradiol on day 2 of menstrual cycle.

Results: Serum AMH was significantly high in PCOS women (p value 0.000) as compared to normally ovulating women and was positively correlated with ovarian volume (p value 0.000), antral follicle count (p value 0.000) and androgens (testosterone and DHEA-S with p value 0.000, 0.000 respectively). AMH was also positively correlated with LH and a negatively correlated with FSH and SHBG in PCOS women but the correlation was statistically not significant (p value 0. 405, 0.792 and 0.368 respectively).

Conclusion: Increased antral follicle count and ovarian volume is commonly associated with raised serum AMH level, so serum AMH can replace ultrasonological examination which require expert radiologist and time consuming. Hyperandrogenemia and related complications like acne, abnormal hair growth etc are common in PCOS women, as serum AMH was correlating well with clinical and biochemical hyperandrogenism, it can replace multiple tests which are done for testing different androgens and thus cost effective. We conclude that AMH as a biochemical marker can increase sensitivity of Rotterdam criteria for diagnosing PCOS, so it should be incorporated in the definition of the Rotterdam criteria for PCOS.

[OP M 2]

Pregnancy and Labor Outcomes in Squat Versus Western Style Sitting Toilet Users: A pilot study

Pooja Singh

Submitter's Email: Pooja.singh3@gmail.com

Type: Original Articles

Objective: a) To evaluate and compare the proportion of normal delivery in squat versus western style sitting toilet.b) To compare the duration of first and second stage of labor. c)To compare antenatal complications like preterm labor, premature rupture of membranes, genital and urinary tract infections in both groups

Materials & Methods: It was a pilot study in which low risk Primigravida at 28 to 32 weeks of gestation recruited between November 2016 and April 2018 in the outpatient department of G.T.B Hospital (Delhi). Low risk Primigravida were categorized into group I (n=50) women used squatting position and group II (n=50) used sitting position during regular toilet usage and followed till delivery. Labor outcome measures include gestational age at delivery, preterm delivery, type of labor, PROM, Labor duration, mode of delivery and neonatal outcome measures (birth weight and NICU admissions)

Results: Favourable findings to squatting group as compared to sitting group were decreased rate of vaginal discharge (10% vs 16%), UTI (12% vs 24%), constipation (2% vs. 6%), second stage labor duration (0.60 vs 1.24 hour), NICU admission (16% vs. 20%) and increased rate of normal vaginal delivery. However there were increased incidence of induction of labor (52% vs.32%), preterm delivery (6% vs. 4%) and mean birth weight (2.83 vs. 2.97 kg) in squatting. Although these parameters had difference but they were not clinically significant.

Conclusion: We did find favorable effect of squatting toilet seat in many parameters i.e. proportion of normal vaginal delivery, second stage labor duration and reduced genitourinary infection, preterm labor, premature rupture of membranes etc . But large community based surveys to see the association of type of toilet seat with the labor outcomes are required.

[OP M 3]

"Stuck Prosthetic Valve: A life-threatening complication in a pregnant women with mechanical heart valve"

Jyoti Baghel

Type: Original Articles

Objective: Pregnancy with prosthetic valve is a challenging situation, being an hypercoagulable state and the maintenance of therapeutic anti coagulation becomes difficult due to the teratogenic effects and altered pharmacokinetics of anticoagulant drugs. We report the outcome of pregnant women with prosthetic valve complicated with stuck valve or valve thrombosis.

Materials & Methods: We retrieved the data of women with prosthetic valve who developed valve thrombosis during pregnancy, from Jan 2011- June 2018. Demographic details, echocardiographic details and their management details were collected. Obstetrics complications and their pregnancy outcome were also collected.

Results: Six women developed thrombosis on the prosthetic heart valve during the time period. All of them had replacement of the mitral valve with TTK Chitra valve in five of them and one had Edwards valve used. Five occurred in first trimester and one in the third trimester. All women except one was on heparin anti coagulation during the time of development of thrombosis. One patient stopped all medications due fear of teratogenicity and reported with valve thrombosis at 10 weeks, who died due to pulmonary edema during thrombolysis. All received thrombolysis with streptokinase with one underwent re-replacement with bio-prosthetic valve. There were two fetal loses and among those continues beyond 20 weeks one required cesarean section for placenta previa

Conclusion: Early diagnosis and intervention under a multi-disciplinary team is required for this medical emergency to avert maternal mortality and morbidity. This highlights the need of preventive strategies such as proper perinatal counselling and heightened monitoring during pregnancy under a team approach in these women.

[OP M 4]

Term Pregnancy in a Woman with Incomplete Transverse Vaginal Septum- An interesting case

Jyotsna Sharma

Type: Case Report

Objective: Transverse vaginal septa are rare anomalies characterized by incomplete vertical fusion or canalization disorder of the Mullerian ducts and urogenital sinus. They may be complete or incomplete. An incomplete transverse vaginal septum may even be first diagnosed only during pregnancy. Management options in such a scenario include an elective cesarean delivery, incision before labor, or a trial of labor.

Materials & Methods: A 24 year old Primigravida presented at 39 weeks of gestation. Gynecological examination revealed a thick transverse vaginal septum with a pin point opening in the upper aspect. Decision was taken for elective caesarean section. Intraoperatively, the uterus was arcuate and seepage of blood was visualised through the small vaginal opening. Finger was introduced into the cervix through the uterine incision onto the tiny opening in the transverse vaginal septum which was further dilated easily by blunt stretching probably because it was incomplete and normal anatomy was restored. Postoperatively, she had an uneventful recovery and was advised regular intercourse to maintain the patency of the vagina at the time of discharge.

Results: Examination at six weeks follow up showed absence of restenosis or scarring of the vagina.

Conclusion: Although rare, cases of pregnancy in women with transverse vaginal septum are reported in literature. Incomplete transverse vaginal septum, may be asymptomatic and maybe first detected during pregnancy. if corrected early, future complications can be avoided.

[OP M 5]

Sigmoid Volvulus in Pregnancy: A case report

Megha Panwar

Type: Case Report

Objective: Sigmoid volvulus in pregnancy is a very rare entity which can be associated with extremely high rates of mortality and morbidity for both mother and fetus. The danger lies in the insidious nature of symptom development. Delay in presentation and diagnosis can result in bowel ischemia,which may require colectomy and colostomy, and also put pregnancy in jeopardy. Maternal complications include perforation, peritonitis and sepsis. Fetal complications include preterm delivery, intrauterine death and neonatal sepsis. A high index of suspicion and use of modern imaging modalities are required for achieving better results for both mother and fetus.

Materials & Methods: Case: A 32-year-old lady, G2P1L1 with

28th week of gestation, came in gynae emergency with history of obstipation for 5-days and abdominal pain with distention for 2 days. She denied vomiting and fever. On clinical examination she was hemodynamically stable and afebrile. Per abdomen examination revealed distension with raised bowel sounds. Fundal height was 28 weeks. Digital rectal examination revealed ballooning of rectum with no fecal staining. USG revealed Gravid uterus with 26 week SLIUF. Abdomen was highly gaseous and bowel loops showed raised peristalsis. An attempt was made to decompress the colon using a soft flatus tube, but was unsuccessful. Emergency laparotomy was performed by the Surgery and OBG team. The sigmoid colon was found extremely dilated and twisted but viable. The affected part of colon was derotated and decompressed. Since the colon was viable, therefore resection-anastomosis of the sigmoid colon was done. Patient was shifted to gynae HDU where she had spontaneous onset of labour and aborted on POD-2.

Results: The diagnosis of sigmoid volvulus is often delayed because symptoms mimic typical pregnancy associated complaints. The diagnosis of sigmoid vovulus should be suspected when patient present with abdominal distension, pain and obstipation.

[OP M 6]

Fetal Outcome in Pregnancy with Gestational Diabetes Mellitus

Sameena Naz

Type: Original Articles

Objective: To determine the effect of gestational diabetes mellitus(GDM) on fetal outcome and to compare their result with normal pregnancies.

Materials & Methods: This is prospective case control study on 50 pregnant patients with gestational diabetes mellitus (15 controlled on diet and 35 controlled on insulin) and 50 normal non-diabetic pregnant patients. Fetal outcome of all the 100 patients were studied.

Results: In the present study, 18% of GDM cases had baby birth weight more than 3.5 kilogram. Differences in mean birth weight were statistically significant between the groups (GDM v/s control). Caesarean section rate (74%) and premature birth (26%) were more in GDM group. Among babies of GDM mothers, 38% of babies were admitted to NICU. The fetal outcome was independent of the time of diagnosis of GDM. But according to the type of treatment received, birth weight was higher in GDM cases controlled on insulin. Risk of hypoglycemia in the babies was also about 2.3 times more in the group treated with insulin.

Conclusion: To avoid adverse fetal outcome, it's crucial to diagnose women with GDM early through screening at appropriate gestational age. In short, a short term intensive care to the mother gives a long term pay off in primary prevention of obesity and diabetes in the offspring.

[OP M 7]

Post-partum Haemorrhage in Vaginal Deliveries: Risk factor analysis in a tertiary care setting

Saumya Kulshrestha

Type: Original Articles

Objective: To calculate the incidence rate of PPH and severe PPH and analyze the risk factor associated with PPH in vaginal deliveries**.**

Materials & Methods: This was a prospective cross–sectional observational study conducted in SSH, BHU from May 2016 to Jan 2017. Total 400 patients who expected to deliver vaginally were included. Exclusion criteria were multifetal gestation, anemic patients, placenta percreta and patients having hypertension or serious cardiovascular disorder, traumatic PPH. Blood loss was estimated post-delivery and other demographic, clinical data were collected from history of the patients. The SPSS Version 21 tool was used to calculate statistical analysis and association of each risk factor.

Results: The incidence rate of PPH in our study was 9.5% and severe PPH was 0.5%. After statistical analysis of various risk factor for PPH, main significantly associated risk factors for PPH were- nulligravida (OR 2.911;95% CI 1.479-5.730) and prolonged duration of labour (OR4.3548;95% CI 2.177-8.7085).Others risk factors studies were-low socioeconomic status, booking status, past history of PPH , episiotomy, past history of dilation and curettage, manual removal of placenta.

Conclusion: Significant risk factors found in our study were prolonged duration of labour and nulligravida female rather than multigravida. Other risk factor like past history of PPH and manual removal of placenta were not found significantly associated with PPH.

[OP M 8]

Comparative Study of Genetic Variation in IL-1 RN Gene in Preterm and Term Labour

Shreshtha Gupta

Type: Original Articles

Format: Oral

Objective: Preterm birth is the leading cause of neonatal morbidity and mortality and accounts for 75% of neonatal deaths annually. It still remains a staggering problem with repercussions on both, the mother and the neonate. Our study aimed to compare IL-1 RN (Interleukin 1 receptor gene antagonist) polymorphism in preterm and term labour.

Materials & Methods: A total of 50 women with singleton pregnancies between 28 and 37 weeks of gestation with preterm labour and 50 women delivered at term were recruited. DNA was extracted from peripheral venous blood sample by a salting out method. IL 1 RN gene polymorphism was analysed. The polymorphic region was amplified by PCR (Polymerase Chain Reaction) using 30 cycles with primers followed by gel electrophoresis.

Results: The results from our study shows an increased risk of preterm birth (Odds ratio: 1.74) in women carrying IL1 RN*2 allele. Though the study at present is not significant (p value= 0.07), but there are chances for this study to be significant if we increase the sample size. Though it is unlikely for a polymorphism in a single gene to affect the outcome and occurrence of a particular disorder, but a combination of genotypes may definitely give us a clear picture.

Conclusion: The presence of a particular genotype or its variant only influences the susceptibility of a particular outcome. A

trigger factor is needed for inducing the activation of a particular gene. In case of its association with complication related to pregnancy, as in our case: pre term birth, the trigger factor is infection. Infection activates pro inflammatory state. Wild type allele (IL1RN*1) limits the invoked inflammation better than 1L1RN*2 allele.

Various studies demonstrate that the in?ammation related polymorphisms associated with preterm labour may differ across race/ethnicity groups. These variations suggest the importance of gene–gene and gene–environment interactions in in?ammatory pathway affecting preterm delivery risk.

[OP M 9]

Contraceptive Choice Opted by Women during Postpartum Period in a Tertiary Care Centre

Prateek Gupta

Type: Original Articles

Objective: To see the current trend of contraceptive choice opted by women during postpartum period delivering in a tertiary care centre.

Materials & Methods: It is a prospective study conducted in the department of Obstetrics & gynaecology in Subharti Medical college and hospital, Meerut. Women were educated about all the available contraceptive choices available on board using GATHER method and cafeteria approach.

Results: One third of the women opted for No contraception while 27% opted for barrier method followed by 23% of the women who chose CuT380A for their contraceptive need. PPIUCD was followed by Inj DMPA which was the choice of approx 12% of the women, followed by Multiload CuT375 which was the choice of 3% of women and 1% women also opted for bilateral tubal ligation while few women i.e. >1% also opted for LNG-IUS as the preferred spacing device.

Conclusion: The mean age of the patients in the study was 26 and maximum patients were P1 followed by P2 followed by multipara. Maximum women were of the lower middle class on socioeconomic scale and due to various factors opted for none of the contraceptive choice given which was as expected followed by most common contraceptive device the barrier method and who were able to understand the benefit of PPIUCD, opted for it. Then newer options like Inj. DMPA and LNG IUS were not unfavoured by the women as women also shown interest in these options. So, apart from PPIUCD we need to start motivating the people for LNG IUS device also explaining the benefits of the device.

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[OP HOG 1]

Effect of Yoga Therapy on Maternal Stress and Clinical Outcomes among Low Risk Antenatal Women: A randomised controlled trail

Nikita Bhartia

Type: Original Articles

Objective: To assess the effect of Yoga therapy on maternal stress level, heart rate variability and obstetric outcomes in low risk antenatal women.

Materials & Methods: Low risk antenatal women were recruited at 18-20 weeks from the outpatient department of GTB hospital Delhi. A total of 90 patients were recruited out of which 78 completed the study. The study subjects were randomized into yoga group (subjects who practiced yoga for 1 hr, 3 times a week for 12 weeks) and control group who did their routine physical activity. Stress was measured by PSS scale at recruitment, midpoint of the study and at the end of study period. Heart rate variability was measured at recruitment and at the end of the study. Pregnancy outcomes were also noted.

Results: 38 women in yoga group and 40 women in control group completed the study. In the yoga group, PSS score decreased by 13.8% at midpoint of the study and by 17.81% at the end of the study ($p<0.001$). In yoga group, HF(indicative of parasympathetic system) component of HRV increased by 20.06% and LF (indicative of sympathetic system) component of HRV decreased by 7.26% which was highly significant($p<0.001$). The LF/HF ratio also decreased by 28.38% in study group($p=0.001$). The incidence of hypertension, preterm delivery and FGR was lesser in the yoga group as compared to control group but the results were not significant statistically. The mode of delivery was comparable between both the groups. The gestational age at delivery, birth weight and incidence of SGA was not significant statistically

Conclusion: Yoga therapy appears to be a promising, non-invasive and non pharmacological intervention for reducing stress in pregnant women thus incorporating yoga therapy in antenatal care appears to be a feasible, safe and cost effective strategy.

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