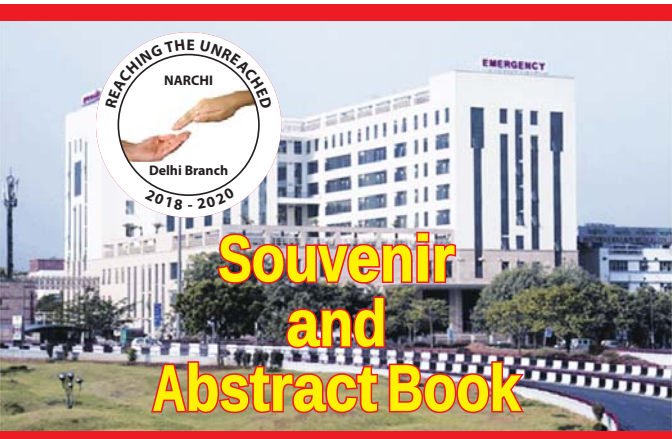
26th Annual Conference of National Association for Reproductive & Child Health of India, Delhi Branch



Souvenir and Abstract Book

Theme:

Postpartum Period - The crucial six weeks

NARCHI Secretariat
Room No. 001, Department of Obstetrics & Gynaecology,
Vardhman Mahavir Medical College & Safdarjung Hospital,
New Delhi-110029

RAHUL GERA
diagnostic centre

Experience Wonders of 5D Ultrasound

One Stop Solution for Fetal Medicine & Genetic Counselling

FACILITIES

- COMPLETE FETAL MEDICINE AND GENETIC SOLUTIONS.
- **ALL FETAL INTERVENTIONS AMNIOCENTESIS CVS FETAL REDUCTION ETC.**
- **GENETIC COUNSELLING BY DM GENETICS.**
- INFERTILITY WORK UP TVS 3D.
- EARLY ANOMALY SCANS AND NUCHAL SCANS.
- FETAL ECHOCARDIOGRAPHY.
- ALL KINDS OF 3D/4D/5D ULTRASOUNDS.

Add: B-7/41, Safdarjung Enl. Near B-6, DDA Commercial Market Opp. Mother Dairy N.D
Ph : 9899777169, 9911276820, 49054441, 49094441
E-mail: rgdc741@gmail.com www.ultrasound5d.com

NARCHI Annual Conference 2019

Office-Bearers

Dr Pratima Mittal
Chief Advisor

Dr Achla Batra
President

Dr Saritha Shamsunder
Vice-President

Dr Indu Chawla
Organising Co-chairperson

Dr Monika Gupta
Secretary

Dr Divya Pandey

Dr Archana Kumari

Joint Secretaries

Dr Anjali Dabral
Treasurer

Dr Reeta Bansiwal
Co-Treasurer

Dr Rupali Dewan

Dr Sunita Malik

Executive Members

Editorial Board

Dr Jyotsna Suri

Dr Rekha Bharti

Editors

Dr Harsha S Gaikwad
Web Editor

Dr Sarita Singh
Co-Editor

Dr Megha Mittal

Dr Monu Singh

Assistant Editors

Dr Sheeba Marwah

Dr Kashika

Co-Web Editors

Committees

Dr Manjula Sharma

Dr Vijay Zutshi

Dr Renu Arora

Dr A K Jain

Scientific Committee

Dr Sonam R Topden

Dr Sunita Yadav

Dr Upma Saxena

CME Committee

Dr Sujata Das

Dr Archana Mishra

Dr Usha Kumari

Dr Yamini

Outreach Committee

Dr Bindu Bajaj

Dr Garima Kapoor

Dr Ritu Aggarwal

Dr Beena Nilaratna

Dr Kavita Aggarwal

Publicity Committee

NARCHI Conference Organising Team ABVIMS & Ram Manohar Lohia Hospital

A-V Co-ordination

Dr Jaya Chawla
Dr Sonal
Dr Kamna Datta
Dr Mrinalni

Quiz

Dr Durgesh
Dr Namita Chopra

Hall Management

Dr Kanika Kumari
Dr Shivani
Dr Rasika
Dr Anjum Ara
Dr Sanjeevini
Dr Anjali
Dr Priyanka Badhana
Dr Neha Pruthi
Dr Urmilla
Dr Komal

Catering Team

Dr Anjum
Dr Namita
Dr Supriya

Registration Counter

Dr Kanika
Dr Shweta

Horticulture

Dr Anjum
Dr Urmila

Lamp

Dr Kanika
Dr Kanika (SR)

प्रो॰ (डॉ॰) संजय त्यागी
स्वास्थ्य सेवा महानिदेशक
PROF. (DR.) SANJAY TYAGI
MD (Medicine), DM (Cardiology)
FAMS, FESC, FRCP (Edin), FACC (U.S.A.)
DIRECTOR GENERAL OF HEALTH SERVICES
DIRECTOR-PROFESSOR, CARDIOLOGY

सत्यमेव जयते

भारत सरकार
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
स्वास्थ्य सेवा महानिदेशालय
निर्माण भवन, नई दिल्ली-110 108
Government of India
Ministry of Health & Family Welfare
Directorate General of Health Services
Nirman Bhawan, New Delhi- 110 108
Tel.: 23061063, 23061438 (O), 23061924 (F)
E-mail : dghs@nic.in

13/11/2019
दिनांक/Dated.....

MESSAGE

I am glad to know that the Department of Obstetrics & Gynaecology, VMMC and Safdarjung Hospital, New Delhi is organizing the 26th Annual Conference of National Association for Reproductive and Child Health of India (NARCHI), Delhi Branch on 23rd and 24th November 2019.

I congratulate the organisers for choosing the pertinent theme for their conference, **"Postpartum period: The crucial six weeks"**. A nation cannot progress if its mothers die during childbirth. For us the priority is to decrease the maternal severe morbidity and mortality. A measurable contributor of maternal morbidity and mortality are postpartum events, "PPH and Sepsis".

I am sure the topics discussed in the conference will help the delegates in reducing adverse events associated with childbirth.

I wish the conference a great success!

(Sanjay Tyagi)

डॉ. सुनील गुप्ता
DR. SUNIL GUPTA
एम.बी.बी.एस., एम.डी.
MBBS, MD
चिकित्सा अधीक्षक
MEDICAL SUPERINTENDENT
वर्धमान महावीर मेडिकल कॉलेज एवं सफदरजंग अस्पताल
VMMC & SAFDARJUNG HOSPITAL
नई दिल्ली-110029
NEW DELHI-110029

सत्यमेव जयते

दूरभाष फोन : 91-11-26168762
फैक्स / Fax : 91-11-26164032
Email : msvmmcsjh@gmail.com

संदर्भ No.

दिनांक / Dated

MESSAGE

It is a great pleasure to know that the Department of Obstetrics & Gynaecology, VMMC and Safdarjung Hospital, New Delhi, is organizing the 26th Annual Conference of National Association for Reproductive and Child Health of India (NARCHI), Delhi Branch on 23rd and 24th November 2019.

The postnatal period that begins immediately after childbirth and lasts for 6 weeks is very crucial phase for both mother and the baby. If a woman is neglected in this period it can lead to severe maternal and foetal morbidity and mortality. Despite being a critical phase in the lives of mothers and newborn babies, according to WHO this is the most neglected period for the provision of quality care. I am glad to know that the Department of Obstetrics and Gynaecology, VMMC & Safdarjung Hospital have chozen "Postpartum period: The crucial six weeks" as theme of their 26th Annual NARCHI, Delhi branch conference.

I hope that the knowledge exchanged in this conference through interactive sessions, panel discussions and the workshops will help the delegates to improve maternal and foetal health.

I congratulate NARCHI Delhi branch for this noble endeavour and wish the organisers of the Conference a grand success!

(Dr. Sunil Gupta)

प्राचार्य का कार्यालय
OFFICE OF THE PRINCIPAL
वर्धमान महावीर मेडिकल कॉलेज एवं सफदरजंग अस्पताल
VARDHMAN MAHAVIR MEDICAL COLLEGE & SAFDARJUNG HOSPITAL
नई दिल्ली -११००२९
NEW DELHI – 110 029
Directorate General of Health Services, Ministry of Health & Family Welfare, Govt of India
Affiliated to Guru Gobind Singh Indraprastha University, Delhi

I am immensely delighted to know that the Department of Obstetrics and Gynaecology, VMMC and Safdarjung Hospital, is organizing the 26th Annual Conference of National Association for Reproductive and Child Health of India (NARCHI), Delhi Branch, on 23rd and 24th November 2019.

Pregnancy and childbirth are considered two critical stages in a woman's life. Although of equal importance, the postpartum period is often not given much significance. For most women, the postnatal period is uncomplicated, however, the first few weeks after childbirth can be dangerous for some.

I am sure that the conference with the theme, "Postpartum period: The first six weeks" will help in improving and updating the knowledge of the delegates and help to improve maternal health in the country.

I wish the conference great success.

Prof N N Mathur
Principal

Message from Secretary General, NARCHI

It is a great pleasure for me to welcome all of you who are attending the 26th Annual Conference of NARCHI DELHI Branch to be held on 23rd and 24th November 2019 in Delhi. My very best wishes for this conference to be a great success. The participants in the conference will enjoy a great scientific programme that will address the relevant issues confronting women's health in India.

Dr Achla Batra with her able team will do their best for the successful out come of the conference.

Dr Subrataa Dawn
Secretary General
NARCHI

Message from National President, NARCHI

I am very happy to learn that National Association for Reproductive and Child Health of India (NARCHI), Delhi Branch, is organizing 26th Annual conference on 23rd and 24th November, 2019.

The aim of NARCHI is to improve maternal and foetal wellbeing. I am sure that the conference with theme "Postpartum period: The crucial six

weeks" will provide a platform to the speakers from Delhi NCR to share their experiences. The knowledge gained from lectures and workshops will help the delegates in their day to day practice.

I wish the organizers of the conference a grand success.

Dr Nirmala Vaze
National President

Message from Organising Chairperson

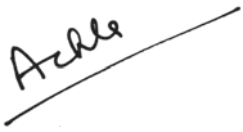
It is a privilege to welcome all our members to the most awaited 26th Annual Conference of NARCHI Delhi Branch. This conference is a platform to put forward one of the most untouched aspect of pregnancy 'The crucial six weeks postpartum.' India is the second most populous country, with 27 million births annually; and hence the puerperium becomes even more pertinent.

The post partum period is one of the most critical time; the dreaded triad of haemorrhage, sepsis and preeclampsia are the major contributors of maternal mortalities in developing nations and most of these complications occur post partum. However this period is usually neglected even by the health care providers as the focus during this time is on the new born. Therefore, the role of the obstetrician is paramount for optimum care of the newly delivered women. The care should not end just with delivery; rather a three pronged approach of educating, counselling and treatment of the puerpera and a vigilant

anticipation of any crisis situation with its appropriate response is desirable from the health care provider. Here in lies a huge role of training the traditional birth attendants and ASHA workers as they are closer to the community and are easily approachable and can be a connecting link. Puerperal complications like pyrexia, breast feeding issues, psychological problems, urinary and fecal incontinence etc may not be taken seriously by the patient and her family leading to morbidity which affects the quality of life.

This conference is an endeavour to sensitize all obstetricians, to reach the unreached and attempts to upgrade postpartum care to another level. I hope that all of you will feel enriched after attending this conference where you will get ample opportunity to interact with the stalwarts.

Waiting eagerly to welcome all of you!



Dr Achla Batra
President NARCHI, Delhi
Organizing Chairperson

Message from Vice President

Dear friends

Sleepless, helpless, forever hungry and anxious about the tiny creature you have produced.... I am sure all of you have faced this!

Remember what helped you recover; emotional and psychological support by family and doctors, very vital during this period. Any slackness in

care could have long term irreversible consequences.

Congratulations to Dr Achla for this unique often forgotten theme for the conference. I am sure you will enjoy and gain knowledge for taking care of this important period in a woman's life!

Dr Saritha Shamsunder
MD FRCOG
Vice President
NARCHI Delhi 2018-20

Message from Organising Secretary

Dear faculty and delegates,

Greetings to all !

As organising Secretary of the 26th Annual NARCHI Delhi Conference, it gives me immense pleasure to welcome you all to this new edition of NARCHI Delhi being held on 23rd - 24th November, 2019 at ABVIMS and RML Hospital, New Delhi. Our team NARCHI at Safdarjung Hospital in association with team RML Hospital has left no stone unturned to make this event grand and an everlasting enriching academic experience.

The scientific programme of this conference is based on the theme "**POSTPARTUM PERIOD - THE CRUCIAL SIX WEEKS**" which is often an unaddressed issue. It is a beautiful amalgamation of four pre conference dedicated workshops which focus on practical and basic issues in basic infertility, post-partum haemorrhage management, menstrual hygiene management and knots & suturing, basic and advance (endosuturing). The main conference encompasses focussed subjects of post-partum disorders

and management will be deliberated by expert faculty in didactic lectures and engaging panel discussions. Orations and Keynote addresses by eminent dignitaries of our field will add to the value of this conference. Special workshop on a unique and less discussed topic of Menstrual Hygiene Management is adding special flavour to our conference. This is apart from the plethora of scientific papers and posters being presented on pertinent theme of maternal and Neonatal health.

The invited faculty comprises of renowned professionals and practitioners from our field. Every delegate attending the conference will have loads of take-home messages as ready reckoners which will definitely help in improving their maternal and child health care practices.

Organising this conference has been a great experience for all of us in the organising team and we have tried our best to meet the expectations of our delegates in spite of certain limitations. I am very thankful to our chief advisor Dr Pratima Mittal and organising Chairperson, Dr Achla Batra, joint secretaries, Dr Divya Pandey and Dr Archana Kumari, editors Dr Jyotsna Suri and Dr Rekha Bharti who have all strived hard in meticulous development of this conference souvenir.

"Coming together is beginning,
keeping together is a progress,
working together is success".

A hearty welcome to every one of you!!

Dr Monika Gupta
Organising Secretary

Editor's Message

Greetings from the souvenir editorial team!

We are extremely delighted to present this special souvenir issue of NARCHI Bulletin at the 26th Annual conference of NARCHI Delhi Chapter. We are grateful to our vibrant NARCHI President Dr Achla Batra for entrusting the editorial team with the task of bringing this conference souvenir and abstract book to all of you.

It was a wonderful experience to compile the paper abstracts from young gynaecologists and write ups from the renowned and experienced faculty. We are thankful to the conference faculty for sparing their valuable time to send us their abstracts in time.

Our hard working editorial team has worked diligently to include even the last minute received abstracts and bring out this e-souvenir. Dr Sheeba Marwah and our young task force, Dr Megha Mittal and Dr Prachi Gupta have done a commendable job in editing and compiling the abstract book. We also earnestly thank Dr Anita Kumar and Ms Jaya for making sure that all the abstracts received were included in the abstract book.

We take this opportunity to express sincere gratitude to our vigorous and visionary Organizing Secretary Dr Monika Gupta and Joint Secretary Dr Divya Pandey, for their invaluable inputs in the making of this souvenir.

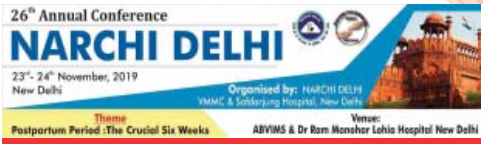
Last but not the least we are appreciative of our publisher and printer Mr Ahuja whose team at Process and Spot has worked tirelessly for the

timely compilation of the souvenir and abstract book.

"Talent wins games, but teamwork and intelligence win championships."
-Michael Jordan

Dr Jyotsna Suri
jyotsnasuri@gmail.com

Dr Rekha Bharti
rekhabharti@gmail.com



Theme
Postpartum Period :The Crucial Six Weeks

Venue:
ABVIMS & Dr Ram Manohar Lohia Hospital New Delhi

Scientific Program | Day 1- Saturday, 23rd November 2019

8.30-9.00 AM	**Registration**	
9.00-9.30 AM	**Postpartum Woes**	
	Chairpersons: Dr Upma Saxena, Dr Shashi Prateek, Dr Bela Makhija	
9:00 - 9:15 AM	Thrombosis and Embolism: Prevention and Management	Dr A G Radhika
9:15 - 9:30 AM	Post-partum Shock-Concealed PPH	Dr Kanwal Gujral
9.30-10.15 AM	**Postpartum Sepsis**	
	Chairpersons: Dr Nivedita Sharda, Dr Suman Mendiratta, Dr Pushpa Chandra	
9.30- 9.45 AM	Pyrexia	Dr Shivani Aggarwal
9.45- 10.00 AM	Surgical Site Inflection	Dr Abha Sharma
10.00- 10.15 AM	Fluid Management	Dr Jyoti Bhaskar
10.15-11.00 AM	**Panel Discussion: Postpartum Contraception**	
	Panelist: Dr Harsha Khullar,Dr Poonam Yadav, Dr Sangeeta Gupta, Dr Chitra Setya, Dr Sandhya Jain, Dr Manjeet Arora, Dr Shehla Jamal	**Moderator:** Dr Indu Chawla & Dr Archana Mishra
11.00-11.10AM	**Tea/Coffee Break**	
11.10- 11.40 AM	**Food for Thought**	
	Chairperson: Dr Banashree Das, Dr Narinder Kaur, Dr Rashmi Vyas	
11.10- 11.20 AM	Rationalizing the Use of Antibiotics in Pregnancy and Postpartum	Dr Rekha Bharti
11.20- 11.30 AM	Enhanced Recovery After Surgery (ERAS)	Dr Devender Kumar
11.30-11.40 AM	Vaccination in Pregnancy and Postpartum	Dr Kiran Aggarwal
11.40-12.00PM	**Key Note Address**	
	Chairpersons: Dr Veena Acharya, Dr Swaraj Batra, Dr S B Khanna, Dr Reva Tripathi	
11.40-12.00PM	Postpartum Surgical Emergencies:	Dr Vijay Zutshi
12.00-12.30 PM	**Smt. Lilawati Ghai Oration**	
	Chairpersons: Dr Urmil Sharma, Dr S N Mukherjee, Dr Kamal Buckshee, Dr Ghai Bhandari	
12.00-12.30 PM	Antimicrobial Resistance: Smart Use of Antibiotics	Dr Manju Puri
12.30-1.10 PM	**INAUGURATION**	
1:10- 2.10 PM	**LUNCH**	
2.10- 2.55 PM	**Panel Discussion -Postpartum Management of Medical Disorders**	
	Panelists: Dr Alka Goel, Dr Asmita Rathore, Dr Gauri Gandhi, Dr Deepti Goswami, Dr Anjila Aneja, Dr Aruna Nigam, Dr Vidushi Kulshrestha	**Moderator:** Dr Pikee Saxena & Dr Sumitra Bachani
2.55-3.40 PM	**Urogynaecological Issues After Delivery**	
	Chairperson: Dr JB Sharma,Dr Ranjana Sharma, Dr Sonal Bathla	
2.55-3.10 PM	Postpartum Urinary Retention & UTI	Dr Monika Gupta
3.10-3.25 PM	Stress Urinary Incontinence (SUI)	Dr Amita Jain
3.25-3.40 PM	Obstetric Anal Sphincter Injuries(OASIS)	Dr Geeta Mediratta
3.40-3.55 PM	**Medical Ethics**	
	Chairperson: Dr SN Basu, Dr Mamta Mittal, Dr Yamini Sarwal	
3.40-3.55 PM	Documentation	Dr Madhvi Gupta

3.55- 4.40PM	**Video Session- Endoscopy Tips & Tricks**	
	Chairperson: Dr Puneeta Mahajan,Dr Sushma Rani, Dr Brig S. Mohan	
3.55-4.10PM	Hysteroscopic Septal Resection	Dr K K Roy
4.10-4.25PM	Laparoscopic cystectomy in Antenatal Period	Dr Shivani Sabharwal
4.25-4.40PM	Laparoscopic Cervical Cerclage	Dr Nikita Trehan
4.40-5.10PM	**Fitness for Doctors**	
	Chairperson: Dr Surveen Ghumman, Dr Susheela Gupta, Dr K. Usha Kumari	
4.40-4.55PM	Meditation	Dr Lalita Badhwar
4.55-5.10PM	Exercise to lift up Mood	Dr Apurva Labhsetwar
5.10-5.20PM	**Tea/Coffee**	

Scientific Program | Day 2- Sunday, 24th November 2019

8.30-9.00 AM	**Registration**	
9.00-9.30 AM	**Post Caesarean Adversities**	
	Chairperson: Dr Veena Ganju, Dr Anjali Dabral, Dr Renuka Sinha	
9.00-9.15 AM	Placenta Accreta	Dr Pratima Mittal
9.15-9.30 AM	Caesarean Scar Ectopic	Dr Mala Srivastava
9.30-10.15 AM	**Panel Discussion: Postpartum Critical Care**	
	Panelists: Dr Rinku Sen, Dr Sarita Singh, Dr Niharika Dhiman, Dr Vinita Gupta, Dr Pinkee Saxena, Dr Madhu Goel, Dr Sohani Verma	**Moderator:** Dr Jyotsna Suri & Dr Kamna Dutta
10.15-10.45 AM	**Practice Essentials**	
	Chairperson: Dr Renuka Malik, Dr Sunita Yadav, Dr Urvashi Sehgal	
10.15-10.30 AM	Postpartum Psychological Problems	Dr Anukriti Verma
10.30-10.45 AM	Postpartum cosmesis	Dr Jayashree Sunder
10.45-11.00 AM	**TEA/ COFFEE BREAK**	
11.00-11.40 AM	**Panel Discussion: Still Birth and Perinatal Death**	
	Panelists: Dr Renu Arora, Dr Seema Thakur,Dr Jaya Chawla, Dr Aparna Sharma, Dr Reema Kumar, Dr Chanchal Singh, Dr Anchal Sablok	**Moderator:** Dr Harsha Gaikwad & Dr Manisha Kumar
11.40-12 .00 PM	**Key Note Address**	
	Chairpersons: Dr Sudha Salhan, Dr Raksha Arora, Dr Ratna Biswas	
11.40-12 .00 PM	Revisiting Breastfeeding & Lactation Failure:	Dr Sadhana Gupta
12.00-12.30 PM	**Dr S K Das Oration**	
	Chairpersons: Dr Sunesh Kumar, Dr Rupinder Sekhon, Dr Achla Batra, Dr Abha Singh	
12.00-12.30 PM	Quality of care in pregnancy	Dr Sunita Malik
12.30-13.00 PM	**Dr Sheila Mehra Quiz**	
	Quiz Masters- Dr Archana Kumari, Dr Sheeba Marwah Co-ordinators- Dr Durgesh, Dr Namita, Dr Priyanka	
13.00-13.15 PM	**Valedictory**	
13.15-14.00 PM	**LUNCH**	

Free Paper's & Poster's 23rd & 24th November
Cordinator: Dr Anita Kumar

To Register Online visit www.narchidelhi.com

Orations

Smt. Lilawati Ghai Oration

Day 1: **November 23rd, 2019**

Time: **12.00 - 12.30 hrs**

Antimicrobial Resistance Smart Use of Antibiotics

Dr Manju Puri
Director Professor, Department of Obstetrics & Gynaecology, Lady Hardinge Medical College, New Delhi

Antimicrobial resistance is a major public health challenge. It is a natural phenomenon caused by misuse and overuse of antibiotics. It is a global problem. Government of India has accepted this as a high priority area and the National Health Policy 2017 has flagged AMR as an important key area to address. Infections with drug resistant organisms can result in prolonged illness, increased morbidity and mortality. It is not only a global threat to public health but also a huge economic burden on the society.

AMR is essentially due to inappropriate, inadequate or overuse of antibiotics. Inappropriate use of antibiotics not only results in AMR and toxicity but kills our protective flora with resultant collateral damage by selecting pathogenic organisms like clostridium difficile. There is an urgent need to stop inappropriate and unnecessary prescription of antibiotics and strengthen the infection control practices. Changing antibiotic prescribing behaviour is difficult

but not impossible. There is an urgent need for an effective and robust antibiotic stewardship program directed towards appropriate drug selection, dosing, route of administration and duration of antibiotic use. The primary goal of antimicrobial stewardship is to optimize clinical outcomes while minimizing unintended consequences of antimicrobial use.

To combat this surging problem multiple interventions, need to be initiated simultaneously. These include sensitization of treating physicians to the problem of AMR and to evidence-based practices of antibiotic prescription, regular audits of the prescriptions, use of infection prevention strategies.

Principles of optimum use of antibiotics include initiation of empiric therapy after collecting relevant cultures, followed by definitive therapy after 48-72 hrs once the microbiological culture reports are available. Empirical therapy is based on the likely source of infection, causative organism, local resistance patterns, antibiotics already received and patient specific factors like drug allergies, renal or liver function test abnormalities. Once the culture and other reports are available the antibiotics can be stopped, escalated or continued. It is also important to convert the route of administration from intravenous to oral route as soon as it is possible. Parenteral route is associated with problems like thrombophlebitis or injection abscess. The antibiotics should be prescribed for the shortest duration with maximum efficacy.

Antibiotic prophylaxis for prevention of surgical site infection is one of the areas where use of antibiotics can be significantly reduced by administering single dose antibiotic with in an hour before the incision and repeat if the duration of surgery is more than 3 hrs or blood loss is >1500 ml and no antibiotics thereafter.

The antibiotic stewardship programme includes leadership commitment, accountability, facility specific antibiotic policy, tracking, recording and regular updating of knowledge of the health workers prescribing antibiotics. The programme can be implemented in small steps as quality improvement projects where both the process and outcome measures are monitored.

For a safer future we need to prescribe antibiotics rationally otherwise a day would come when we will fall short of effective antibiotics which are life saving.

Dr S K Das Oration

Day 2: November 24th, 2019, 12.00-12.30hrs

Quality of Care in Obstetrics

Dr Sunita Malik
Professor & Consultant, Obstetrics & Gynaecology, Vardhman Mahavir Medical College & Safdarjung Hospital, New Delhi

Quality of healthcare is defined as the degree to which health services for individuals and population increases the likelihood of desired health outcome and care consistent with current professional knowledge. In obstetrics the desired outcome is delivery of a healthy baby to a healthy mother.

Quality and safety assurance in obstetrics care are of vital importance given the large volume of births in India(49481births per day)[1] Moreover, obstetrics is unique because it involves two patients (mother and fetus) and unexpected maternal and neonatal outcomes such as PPH and neurologic damage can have significant and often long term health consequences on previously healthy individuals. There is always potential for improvement and need for continued attention to perinatal care quality.

India is a diverse country with different levels of Quality of care (QOC) in different states which is reflected in the maternal mortality rate (MMR). Overall the MMR is 130 per 100,000 women as per 2016 census with the wide range of 70 in Kerala to 188 in Assam state. Moreover research has shown wide variability in intrapartum practices across the hospitals in rural and urban areas and even different medical colleges and hospitals in a particular area.

Even in USA considerable proportion of hospitals reported never or infrequent conduct of interprofessional simulations for obstetric emergencies and one tenth of obstetric units did not regularly review cases with significant morbidity or mortality, highlighting opportunities for improvement[2]. To overcome these disparities Government of India has come up with LaQshya (Labor room qualitative improvement initiative) launched in 2018[3]. WHO has set up its own quality standards of obstetric health care[4].

An essential component of all of these

programs is the concept of an integrated system in which level 3 or level 4 maternal centers provide education and consultation, including training for quality improvement initiatives and severe morbidity (near miss) and mortality care review to level 1 and level 2 facilities and provide for a streamlined system for maternal transport when necessary.

Assessment of QOC involves 3 interlinked but distinct groups.

1. **The Consumers** include the patients and to a certain extent, the media.
2. **The Healthcare Providers** include the obstetricians, midwives, birth attendants and associate professionals like pediatricians and anesthesiologist and other multidisciplinary specialists.
3. **Purchasers** include the governing body of the hospital, district, state or central health authorities.

All the primary care groups want high QOC. The responsibility of clinical governance lies with the purchasers, the trust chiefs and national bodies.

Components of Clinical Governance

The purchasers can improve the QOC based on following features:

- Clinical Guidelines
- Clinical risk management
- Complaints procedures
- Revalidation of specialist
- Services accreditation

To improve QOC from patient view point could be setting up patient charter for overall patient care and for voicing concern over their management. Every patient wants respectful maternity care. Each institution should have a set complaint procedure for dealing with patient concerns. Main area of concern in obstetrics is lack of communication between health professionals and patients. According to them good communication is valued at a much higher level than the mode of delivery or any procedure carried out during labour and delivery. For example rather than comparing the epidural rates and caesarean section in different obstetric units, a relevant message might be: How many women who stated a preferance for epidural analgesia during labour actually received one and how long did they wait before they actually got it.

With breastfeeding initiative which mothers received what they felt to be adequate

support with them rather than the overall breastfeeding rate?

The health professional view is based on the quality indicators like MMR; near miss rate; like eclampsia rate; caesarean rate; IOL rate; APGAR score ;need for blood transfusion; use of antibiotics; maternal stay >5 days for a normal delivery. And >7 d for LSCS and many other clinical outcomes for both mother and fetus.

The managers measure QOC in terms of financial cost to the trust; to find out where the unit is saving and losing money; employment of clinical risk managers; spending on resources on training sessions and machines so that the complications in mother and babies are less; litigations are less, readmission rate is decreased, thereby decreasing the overall cost to the hospital.

A three part classification of quality problems which has been widely used since its inception in the early 1990's focuses on: **Overuse** is the provision of health services when their risks outweigh their benefits for the recipient of that care e.g. doing surgery on a patient who is not going to benefit from the procedure.

Underuse is failure to provide a health service where their benefits exceed their risk eg immunization. **Misuse** is the failure to effectively deliver a proven benefit so that its full potential benefit is not conveyed to the patient (e.g. use of antibiotics).

To conclude Quality of care varies widely in different areas of our country and racial and ethnic disparities in obstetric and neonatal outcomes persist. Further research is needed to elucidate causes of such variation and its effect on patient safety and maternal and neonatal outcomes. In the meanwhile one can follow the quality measure standards provided by Government of India-LaQshya, FOGSI and WHO which are quite comprehensive.

Key Note Address

Day 1: **November 23rd, 2019**

Time: **11:40 - 12:00 hrs**

Postpartum Surgical Emergencies

Vijay Zutshi
Professor & Consultant, Department of Obstetrics & Gynaecology, Vardhman Mahavir Medical College & Safdarjung hospital

The surgical emergencies in the postpartum period have a wide range of presentation. The commonest surgical emergency is postpartum haemorrhage which needs to be dealt separately. In this presentation other commonly encountered surgical emergencies will be dealt with. These presentations could be related indirectly to obstetrics or unrelated.

Relaparotomy following caesarean delivery within 24 hours has been extensively studied. Studies in the literature have shown the incidence to be ranging between 0.2 and 0.7%. The main indications for relaparotomy have been stated to be of haemorrhagic aetiology like bleeding and haematoma to be the leading cause for reexploration. It has been reported that bleeding accounted for 70% of indications of relaparotomy and additional risks for relaparotomy after CS included previous CS, severe preeclampsia, uterine rupture, placental abruption and cervical tear.

Other common indications for relaparotomy

is sepsis, which is seen in around 36.1% patients in some studies. Puerperal infection is one of the most common morbidity. It is estimated to occur three times higher in low-risk patients undergoing planned cesarean delivery compared to those undergoing planned vaginal delivery (0.6% to 0.21%, respectively).

As per WHO statistics, approximately 5 lakh women died from TB in 2014. TB accounts for 15-34% of indirect causes of obstetric mortality and is associated with a six-fold increase in perinatal mortality. While lymphadenitis is the most common extrapulmonary site of tuberculosis, tuberculous peritonitis is not a rare entity especially in postnatal women. There is exacerbation during the postpartum period. Due to increasing levels of progesterone in pregnancy, a Th2-type immune response is favored and the Th1 helper cells are suppressed. This change is reversed in the postpartum period. It is now know that women in early postpartal period are twice at risk to develop tuberculosis than pregnant women. This is attributed to the "immune reconstitution" occurring in this period, which can result in increased susceptibility to fresh infection and reactivation of tuberculosis.

The patient can present with abdominal distension and shock. Such an acute and rapid presentation of pelvic tuberculosis with shock in the puerperal period, necessitates operative intervention. One should have a high index of suspicion of Tuberculous peritonitis and prompt operative management with early initiation of antituberculous therapy can give good patient outcome. Infected uterine incisional necrosis and dehiscence is an extremely rare but a potentially lethal complication of cesarean delivery. It has been defined as the surgical evidence of uterine incision necrosis with or without separation of the edges of the uterine incision, subsequent to an acute infection. Due to the rarity of these cases, the exact incidence cannot be estimated. The infected uterine incisional necrosis and dehiscence is a serious complication of cesarean delivery, delayed treatment of which may result in septic shock and death. Since there are no treatment guidelines based on a good level of evidence, the surgical treatment should be tailored to patients on individual basis (e.g. clinical presentation, surgical findings and patient desire to preserve fertility). In most cases, total or subtotal

hysterectomy and surgical debridement with conservation of the unaffected adnexa remain the gold standard approach.

Intra-peritoneal bleeding after normal vaginal delivery though very rare with an undefined etiology can also cause postpartum collapse. Its occurrence poses both diagnostic and therapeutic difficulties. Immediately after delivery with the existence of after labor pains, abdominal pain which might be suggestive of an intra-abdominal pathology can be masked. Pseudo aneursyms can present as hemoperitoneum which necessitates an exploratory laparotomy. A high index of suspicion of this clinical entity is imperative so as not to delay diagnosis and management. Use of multi row computed tomographic angiography has been used to identify the cause of hemoperitoneum.

The rupture of uterine scar after normal delivery in patients having previous caesarean section is another situation where laparotomy may have to be done if patient shows signs of haemorrhagic shock.

Gynaecological conditions where surgery may be required in postpartum period are spontaneous rupture of uterine fibroid, torsion of ovarian cyst, tubo-ovarian abscess and torsion of subserosal fibroid.

Non gynaecological causes giving rise to surgical emergency can be from any other organ. Gallbladder perforation in the immediate postpartum period has been reported in those women who had a history of cholelithiasis during antenatal period. Women with a history of typhoid fever can present with perforation of ulcer in postpartum period where urgent surgical intervention is required. The diagnosis generally gets delayed because one tends to think of perpuerial sepsis upfront. Approximately 10% of patients with Crohn's disease develop an intra-abdominal abscess. Acute complications of Crohn's disease, such as abscess, may occur during pregnancy and the postpartum period. CT scan and colonoscopy can be performed safely in pregnancy to aid in this diagnosis. In these patients, indications for surgery are the same as in non-pregnant patients. Bladder rupture in postpartum period is a rare entity and patient requires laparotomy to close the defect in the bladder to avoid chemical peritonitis.

Conclusion: Wide range of conditions may warrant a surgical intervention in postpartum period. The key to the proper

management is the good history in the preceding period specially for associated surgical and medical co morbidities.

Day 2: **November 24th, 2019 |**
Time: **11:40 - 12:00 hrs**

Revisiting Breast Feeding and Lactation Failure

Dr Sadhana Gupta
Senior Consultant Obstetrics & Gynaecology, Jeevan Jyoti Hospital and Medical Research Centre, Gorakhpur

In global hunger index report India has got the highest percentage of children who suffer from under nutrition. Early initiation of breast feeding and exclusive breast feeding are among the most effective intervention to reduce infant child morbidity and mortality, however rates of exclusive breast feeding in most regions have increased only marginally in last 20 years. (Victoria CG et al 2016)

Breast milk is best, there is no question about it. It is the ideal nourishment for infant for about 6 months of life. It contains all nutrients, antibodies, hormones, antioxidants which an infant needs to thrive. Mother is also a beneficiary as it prevent against PPH, restores body weight, act as contraception, prevent against breast and Genital cancer and add to relaxed status and emotional bonding. Breast feeding leaves zero carbon print as against formula feeding which from production to packaging and transport cost heavily to finance as well environmental hazard.

Optimal infant feeding practices are earliest initiation of breast feeding, exclusive breast feeding for first six months of life with no other food or liquid and continued breast feeding for up to at least 2 years of age or beyond while receiving appropriate complimentary food.

In Asia and particularly India breast feeding is deep rooted cultural norm, yet it is far away from optimal feeding practices. Pre lacteal feed are given to 55-60 % of newborn. First hour initiation of breast feeding range from 6 % to 45 % (DLHS 3), exclusive breast feeding for 6 months is practiced by 30-50 % of women and colostrums is given to infant in 11-87 % of infants. Rate of bottle feeding is 11-20%.

In last 2 decades optimal infant feeding practices are not increased up to expectation which emerged from high rates of institutional deliveries. There have been discrepancies in data of NFHS 4 and WBTI report 2012. Later shows lack of progress while NFHS 4 demonstrates 1.7% per year rise of breast feeding rates. However Infant milk Substitute act has checked the decline of breast feeding and as per WBTI India has scored 9/10 in 2015 in strict following of the act. Over all in Low middle income countries late initiation and low rate of exclusive breast feeding are priority challenges while in high income countries knowledge of benefit are well known yet social and commercial factors stays. EBF is crucial for countries like India because if it is followed, 22 % of newborn death, >50 %of diarrhoea and pneumonia in newborn can be prevented, reduction in adulthood metabolic disorders and around 7 billion dollars are saved for national economy and another 7 billion dollars are earned with gain in improved health of human resources.

Obstetrician and paediatrician along with team of obstetric care system have a pivotal role in improving the scenario. Counselling and sensitization of women and family members for early and exclusive breast feeding is crucial. After delivery earliest initiation of breast feeding irrespective of mode of delivery is another catch point. The psychological, as well physiological care of many trivial issues like mastalgia, sore and cracked nipple, mastitis plays crucial role in prevention of secondary lactation failure. In case of low birth weight, multifetal pregnancies, newborn admission to NICU are other important causes of lactation failure, which if addressed with determined effort of team of Obstetricians and paediatricians can be managed with positive outcome. Observation for 2 hours to one day of newborn, test feed and separating mothers from newborn are few practices in high level setting and need a sharp introspection.

However, there are many strong influencing factors for reduced rates of EBF. Alive and Thrive initiative (Jenney and Creswell 2018) and Lalitpur project at India clearly demonstrates that multidimensional support can improve breast feeding practices in short span of time. One to one and repeated counselling by health workers works best as compared to group and one time counselling.

Besides new social economic challenges are emerging. Higher number of working mothers, urbanization with no support from family members, poor following of maternity benefit and insurance in many sectors especially private and unorganized ones, unavailability of crèche facilities at working places are few areas which need intervention at society as well Government levels. Infant Substitutes lobby aggressive advertising also plays a role in altering behaviour of people. Health care system and professional bodies must mobilize and strengthen the optimal feeding practices for newborns aggressively and with transparency. Regular training of paramedical for lactation management is another proven effective intervention.

Astang declaration October 2018 calls for individual and communities to be empowered and engaged in maintaining and enhancing their health and well being. Way forward is to disseminate sound evidence, foster positive societal attitude, demonstrate political will, regulate breast milk substitute industry and scale up and enable as well monitor breast feeding promotion intervention.

Invited Lectures

Postpartum Thrombosis and Embolism: Prevention and Management

Dr A G Radhika
Consultant Obstetrics & Gynaecology, University College of Medical Sciences & Guru Teg Bahadur Hospital, New Delhi

Pregnancy and the puerperium are well-established risk factors for deep vein thrombosis (DVT) and pulmonary embolism (PE), ie venous thromboembolic disease (VTE). VTE is more common in postpartum women than in antepartum and nonpregnant women, and more common after cesarean than vaginal birth. The risk is highest in the initial weeks postpartum and then gradually declines to baseline by 12 weeks postpartum.

Important factors that increase the risk are previous VTE, thrombophilia, certain medical comorbidities (eg, sickle cell disease), obesity, smoking, cesarean delivery, and postpartum hemorrhage.

Thromboprophylaxis can be

1. Pharmacologic (ie anticoagulation) or
2. Mechanical (eg intermittent pneumatic compression devices or graduated compression stockings).

Indications, method and duration of thromboprophylaxis in postpartum women

Indications

- Postpartum thromboprophylaxis risk assessment

Risk Category

High Risk

1. Anyone requiring antenatal LMWH
2. Previous VTE
3. High-risk hereditary thrombophilia (compound heterozygous or homozygous for Factor V Leiden or
4. Prothrombin gene mutation or some deficiencies of antithrombin)
5. Low- and intermediate-risk (some antithrombin deficiencies, Protein S deficiency, Protein C deficiency,
6. Heterozygous for Factor V Leiden or prothrombin gene mutation) hereditary thrombophilia and positive
7. Family history of VTE*
8. Antiphospholipid syndrome Postpartum thromboprophylaxis indicated for at least 6 weeks

Intermediate Risk

1. Caesarean delivery in labour
2. Readmission or prolonged admission (≥ 3 days) postpartum
3. Surgery in the puerperium (except immediate repair of the perineum)
4. Medical co-morbidities e.g. cancer, heart failure, peripartum cardiomyopathy, active systemic lupus erythematosus, inflammatory polyarthropathy or inflammatory bowel disease, nephrotic syndrome, type 1 diabetes mellitus with nephropathy, sickle cell disease, current intravenous drug user
5. BMI ≥40 kg/m2

Low Risk

1. Age >35 years
2. BMI ≥30 kg/m2
3. Parity ≥3
4. Smoker
5. Elective caesarean delivery
6. Family history of VTE
7. Low-risk thrombophilia
8. Gross varicose veins‡
9. Current systemic infection
10. Immobility, e.g. paraplegia, long-distance travel (>8 hours)
11. Multiple pregnancy
12. Preterm delivery in this pregnancy (<37 weeks)

13. Stillbirth in this pregnancy
14. Mid-cavity or rotational operative delivery
15. Prolonged labour (>24 hours)
16. Postpartum haemorrhage (> 1 L or blood transfusion requiring re-operation)

*A positive family history of VTE is associated with a two- to fourfold increase in the risk of VTE.

Postnatal VTE prophylaxis: Refer to Algorithm

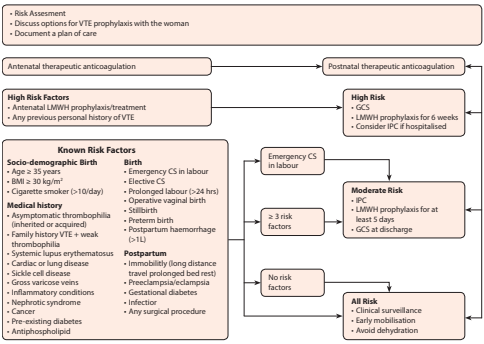
Treatment of postpartum pulmonary embolism

1. Hemodynamic stability to be restored
2. Respiratory support
3. Anticoagulation: Low molecular weight heparin may be chosen for patients with hemodynamically stable pulmonary embolism with normal renal function & in whom rapid onset of anticoagulation is required.

   In contrast, heparin is preferred in patients who are hemodynamically unstable and may require thrombolysis or embolectomy.

Long-term (maintenance) anticoagulant therapy for venous thromboembolism (VTE) is administered beyond the initial period of anticoagulation for a finite period of 3 to 12 months

Women who require more than 6 weeks of postpartum anticoagulation therapy may be shifted to warfarin



Puerperal Pyrexia

Dr Shivani Agarwal
Senior Specialist, Department of Obstetrics and Gynaecology, Kasturba Hospital, Daryaganj, Delhi

Definition: Postpartum fever is defined as a temperature greater than 38.0°C on any 2 of the first 10 days following delivery

exclusive of the first 24 hours. The presence of postpartum fever is generally accepted among clinicians as a sign of infection that must be determined and managed.

Pathophysiology: Local spread of colonized bacteria is the most common etiology for postpartum infection following vaginal delivery. Endometritis **is the most common infection in the postpartum period. Other postpartum infections include (1) postsurgical wound infections, (2)** perineal cellulitis, (3) mastitis, (4) respiratory complications from anaesthesia, (5) retained products of conception, (6) urinary tract infections **(UTIs), and (7) septic pelvic phlebitis. Wound infection is more common with** caesarean delivery. A review study by Haas et al indicated that cleansing the vagina with a povidone-iodine or chlorhexidine **solution immediately prior to caesarean delivery decreases the risk for postoperative** endometritis.

General risk factors: The following increase the risk for postpartum infections: History of caesarean delivery, Premature rupture of membranes, Frequent cervical examination (Other than a history of caesarean delivery, this risk factor is most important in postpartum infection), Internal fetal monitoring, Pre-existing pelvic infection including bacterial vaginosis, Diabetes, Nutritional status and Obesity. In the study by Bauer et al, of approximately 45 million hospitalizations for delivery between 1998 and 2008, medical conditions that were found to be independently associated with severe sepsis included congestive heart failure, chronic kidney disease, chronic liver disease, and systemic lupus erythematosus. An association with rescue cerclage was also found.

Epidemiology: In a study by Yokoe et al in 2001, 5.5% of vaginal deliveries and 7.4% of caesarean deliveries resulted in a postpartum infection. The overall postpartum infection rate was 6.0%.

Management: *The history* and course of the delivery is important in the evaluation of postpartum patients. Obtain the following information: Ascertain if the delivery was vaginal or caesarean; Ascertain if premature rupture of the membranes occurred; Determine if the patient had any prenatal care; Determine if the patient was diagnosed or treated for any infections during pregnancy or during the antepartum period; Assess the patient's symptoms. *Features of postpartum infection* vary

depending on the source and may include the following: Flank pain, dysuria, and frequency of UTIs; Erythema and drainage from the surgical incision or episiotomy site, in cases of postsurgical wound infections; Respiratory symptoms, such as cough, pleuritic chest pain, or dyspnoea, in cases of respiratory infection or septic pulmonary embolus; Fever and chills; Abdominal pain; Foul-smelling lochia; Breast engorgement in cases of mastitis.

Physical Examination: Focus the physical examination on identifying the source of fever and infection. A complete physical examination, including pelvic and breast examinations, is necessary to suspect the cause like endometritis, UTI, surgical wound infections mastitis, septic pelvic thrombophlebitis, perineal cellulitis etc.

Lab Investigation: To be done to confirm the diagnosis.

Treatment and Management: To be done as per the cause.

Surgical Site Infections in Post-Partum Women

Dr Abha Sharma
MS (MCH) & Sr Specialist, University College of Medical Sciences and Guru Teg Bahadur Hospital, Delhi

A surgical site infection is defined as an infection which occurs at the incision / operative site (including drains) within 30 days after surgical operation if no implant is left in place / within 1 year if an implant is left in place. The infection must appear to be related to the surgical procedure. According to CDC's National Nosocomial Infection Surveillance system 38% of all nosocomial infections in surgical patients are surgical site infections (SSI). Surgical site infections delay recovery, prolong hospitalization or outpatient treatment, may necessitate readmission, increase hospital bills as well as other morbidities and mortality, thus are responsible for significant psychological and economic burden to the society. Caesarean Section is a clean contaminated type of operation and carries five to 20-fold increased risk of infection compared to vaginal delivery. The most common postoperative infections following caesarean section are urinary tract infections, surgical site infections (SSI) or infections of the pelvic organs. The rate of surgical site infection after caesarean

section range from 3% to 15%, depending on the surveillance methods used to identify infections, the patient population, and the use of antibiotic prophylaxis.

Causes of SSI: *Intrinsic factors* are patient related and include age, obesity, underlying medical conditions like diabetes mellitus, hypertension, asthma, immunocompromised states like HIV infection, hypoalbuminemia, hyperlipidemia and anemia. *Extrinsic factors* relate to the management and care, which include preoperative preparation of the patient (part preparation and skin asepsis), type of procedure (emergency/elective), type of anesthesia (regional/general), type of skin incision (horizontal/vertical), method of skin closure, type of suture used (mono/polyfilament) or use of staples, antibiotic prophylaxis, length of time membranes ruptured prior to operation, manual extraction of placenta, chorioamnionitis, number of vaginal examinations carried out before surgery, duration of operation, transfusion of blood products, grade of operator (consultant/registrar/senior resident), previous caesarean section, and environment of the operating room. Knowledge of risk factors associated with surgical site infection is essential to develop targeted prevention strategies and reduce the risk of infection.

Majority of surgical site infections become apparent between the 5th and 10th postoperative days but can occur up to 30 days. The CDC definition describes three levels of surgical site infection; ***'Superficial incisional'*** affecting the skin and subcutaneous tissue, ***'Deep incisional'***, which affects the fascial and muscle layers and ***'Organ or Space infection'*** which involves any part in the body other than the incision that is opened or manipulated during the surgical procedure.

Role of Microbes: Source of Microbes in SSI could be from patient's skin or vagina, Surgeon, Theatre Environment, Equipment or other O.T. staff. Nasal colonization of OT staff should be treated with Mupirocin ointment. In clean-contaminated procedures like caesarean section or episiotomy; the polymicrobial aerobic–anaerobic flora namely enteric gram-negative bacilli are the most common followed by enterococci and group B streptococci. Clostridia and Bacteroides spp. are commonly isolated anaerobic organisms. These are endogenous vaginal flora usually introduced following repeated

vaginal examinations or instrumentation.

Prevention of SSI: *Pre-operative Phase*- Patient should shower with soap within 8-12 hours. Shaving is not required usually; it can lead to infection risk due to cut or scratches. If required for episiotomy, clipping of hair can be done. Patient should wear a comfortable clean dress. Theatre staff dress should be non-sterile, clean with Cap & Mask and OT Shoes. Hand washing routine should be followed strictly. "Antibiotic prophylaxis" is the most important intervention for prevention of SSI. Intravenous antibiotics should be given within 60 minutes before skin incision and as close to time of incision as practically possible. For caesarian section it can be given pre-incision or after cord clamping. Single dose with long-enough half-life to achieve activity for duration of operation like Augmentin or cefotaxime can be used. Repeat dose if surgery lasts more than 6 hours.

Intra operative Phase: The surgical team should be in sterile attire and double gloved. Patient's skin preparation should be done with chlorhexidine or povidone Iodine; alcohol based for skin and aqueous for vagina. Diathermy should not be used for surgical incision. Patient homeostasis should be well maintained by Anesthetist; avoid Hypothermia, Hypoxia and Infuse adequate fluids. Theatre discipline should ensure sterile & quiet environment, avoid to & fro movement, ensure sterility of equipment & theatre, Laminar airflow/ Filters should be used. If possible antibiotic coated triclosan sutures can be used. Better results are obtained with silk suture for skin rather than staples.

Post-operative Phase: Post-operative wound dressing should be done using aseptic technique with normal saline after 3-4 days.

Diagnosis and Treatment of SSI: *Superficial Incisional infection* presents with redness, pain, swelling, heat or pus discharge. After sending culture sensitivity from the wound, broad spectrum antibiotics should be started till report is available. Pus should be drained. Regular dressings should be done. *Deep Incisional infection* will show as wound gaping, fever, pain or pus discharge. With gaped wounds debridement to be done and interactive dressings to be applied. *Organ/Space SSI* will present with fever, pain abdomen, anorexia, discharge through drain with low general condition. This requires urgent management with

laparotomy and removal of pus and infected tissue even hysterectomy if required along with supportive treatment. Blood culture should be sent.

Employing strict infection control policies by a functional infection control committee is the most important step in preventing SSI. This committee should be able to monitor surveillance studies with a view to issuing guidelines to circumvent established risk factors, to suggest endemic bacterial flora and appropriate antibiotics. This would bring the level of SSI to an acceptable level.

Fluid Therapy in Postpartum Sepsis

Dr Jyoti Bhaskar
Senior Consultant, Obstetrics and Gynaecology,
Max Super speciality Hospital, Vaishali

Maternal sepsis is a preventable cause of maternal mortality and in recent years recommendations of international bodies like WHO, Surviving Sepsis, RCOG, UKOSS have made paradigm shift in the diagnosis and management protocols of Sepsis. Women should be advised, within 24 hours of giving birth, of the symptoms and signs of conditions, including sepsis that may threaten their lives and require them to access emergency treatment. Timely recognition of maternal sepsis and fast administration of intravenous antibiotics is critical to prevent mortality

Consideration should be given to '***Declaring Sepsis'***, analogous to activation of the major obstetric haemorrhage protocol, to ensure the relevant members of the multidisciplinary team are informed, aware and act. Critical care should be provided early by **adopting one-hour bundle** to ensure prompt administration of appropriate antibiotics, fluid resuscitation and supportive therapy.

Hour 1 Surviving Sepsis Campaign (SSC) Bundle include: (1) Measure lactate level, remeasure if lactate > 2 mmol/l (2) Obtain Blood cultures prior to start of Antibiotics (3) Administer Broad spectrum antibiotics (4) **Begin rapid administration of 30ml/kg crystalloid for hypotension or lactate >4 mmol/l** (5) Apply vasopressors if patient is hypotensive during or after fluid resuscitation to maintain MAP ≥ 65 mmHg.

'Time Zero' or time of 'Presentation' is defined as the time of triage in emergency

department or if presenting from another care venue from the earlier chart annotation consistent with all elements of sepsis (formerly severe sepsis) or septic shock ascertained through chart review.

Fluid therapy in sepsis: The fluid therapy should be guided by understanding the four phases of septic shock management (ROSE). The dose and duration must be as small and short as possible, and the volume must be tapered when shock is resolved.

Resuscitation: On recognition of sepsis-induced hypotension and/or elevated lactate concentrations, fluid resuscitation is recommended to be initiated immediately and completed within the first 3 hours. Guidelines recommend at least a **30-mL/kg bolus of crystalloid fluid as the initial resuscitation.** *Crystalloid is the fluid of choice for initial resuscitation*. Guideline recommendations do not currently advocate either balanced crystalloids or saline as the resuscitation fluid of choice in sepsis, but state that either is an appropriate first-line therapy. Balanced crystalloids may be preferred in patients with hypernatremia or hyperchloremia. The current SSC guidelines recommend normalizing lactate as a resuscitation goal and no longer recommend that parameters such as central venous pressure (CVP) and $ScvO_2$ guide therapy.

Optimisation: At this phase, fluid accumulation reflects the severity of illness and might be considered a "biomarker" for it. The greater the fluid requirement, the sicker the patient and the more likely organ failure (e.g. acute kidney injury) may occur. After the initial fluid resuscitation, additional fluids should be guided by frequent reassessment of intravascular volume and hemodynamic status using dynamic measures. Indices of fluid responsiveness are again of utmost importance, since fluid administration should be stopped when these indices become negative to avoid fluid overload. Dynamic measures such as PLR and fluid bolus challenge are more likely than static measures to yield accurate predictions of volume responsiveness in adult patients with shock and guide further fluid therapy. Crystalloids are used for subsequent intravascular replacement.

Colloids: Albumin in addition to crystalloids is suggested when patients require a substantial number of crystalloids. 5% albumin is most commonly used in patients with hypovolemia to administer as much

volume as possible. Hydroxyethyl starches are not recommended for fluid resuscitation in patients with sepsis or septic shock because of the increased risk of death and acute kidney injury (AKI)/renal replacement therapy (RRT).

Stabilisation: With successful treatment, stabilization should follow the optimization phase, evolving over the next few days. It is distinguished from the prior two by the absence of shock or the imminent threat of shock. The focus is now on organ support and this phase reflects the point at which a patient is in a stable steady state. Fluid therapy is now only needed for ongoing maintenance in the setting of normal fluid losses (i.e. renal, gastrointestinal, insensible) and replacement fluids if the patient is experiencing ongoing losses because of unresolved pathologic conditions.

Evacuation: The patient may either further recover, entering the "flow" phase with spontaneous evacuation of the excess fluids that have been administrated previously, or, the patient remains in a "no-flow" state, usually resulting from global increased permeability syndrome with ongoing fluid accumulation due to capillary leak. The risk at this phase is to be too aggressive with fluid removal and to induce hypovolemia and thus preload responsiveness helps guide the management. If fluid is needed at this phase, the use of albumin seems to have positive effects on vessel wall integrity facilitates achieving a negative fluid balance in hypoalbuminemia and may be less likely to cause nephrotoxicity.

Key Points

- It is important to Think Sepsis, recognise and differentiate it from hypovolemic shock as the fluid therapy is different in both.
- In patients with septic shock, initiate the SSC 1 hr Bundle.
- Initial fluid resuscitation is 30 ml/kg of crystalloids within 3 hrs.
- Further fluid requirement has to be directed by dynamic tests of fluid responsiveness as fluid overload in these patients can lead to further organ dysfunction and mortality.
- If colloid has to be given, albumin is the colloid of choice.

Obstetric Anal

Sphincter Injury

Dr Geeta Mediratta
Senior Consultant, Institute of Obstetrics & Gynaecology, Sir Ganga Ram Hospital, New Delhi

This topic will cover important points of the perineal anatomy; classification of Obstetric Anal Sphincter Injury (OASI); measures to prevent OASI; evaluation of OASI; and technique of repair of these injuries.

The classification of OASI is follows:

• I Degree	• Perineal skin/Vaginal epithelium only
• II Degree	• Involvement of perineal muscles, but no sphincter involvement
• III Degree	• Disruption of anal sphincter muscles
• 3a	• < 50% External anal sphincter torn
• 3b	• > 50% External anal sphincter torn
• 3c	• Internal anal sphincter torn
• IV Degree	• Disruption of anal epithelium

For early recognition, all women having an operative vaginal delivery or extensive injury should be examined by a practitioner trained in the recognition and management of perineal tears. The timing of repair should be as soon as possible. The repair should always be done under general/regional anesthesia in OT setting with full asepsis, good lighting and an access to instruments and diathermy.

The Perineal Repair Pack consists of: Weislander retractor, 4 Allis tissue forceps, 4 Artery forceps, McIndoe's and stitch scissors, needle holder and toothed forceps

The suture material for internal anal sphincter repair is, 3-0 PDS and 2-0 Vicryl.

For external anal sphincter repair, end to end with figure of eight, overlap technique using 3-0 PDS or 2-0 Vicryl is used.

The antibiotic recommended intra op is Inj. Cefuroxime 1.5 gm and Inj. Metronidazole 500 mg.

In the post operative period oral antibiotics, stool softeners / Foleys, and appropriate diet is important.

Future Deliveries

- All women who sustained an obstetric anal sphincter injury in a previous pregnancy should be counselled about

the risk of developing anal incontinence or worsening symptoms with subsequent vaginal delivery.

- All women who have sustained an obstetric anal sphincter injury in a previous pregnancy and who are symptomatic or have abnormal endoanal ultrasounography and / or manometry should have the option of elective caesarean birth.

Post Cesarean Adversities: Placenta accreta

Dr Pratima Mittal, Dr Jyotsna Suri
Professor, Obstetrics & Gynaecology, Vardhman Mahavir Medical College & Safdarjung Hospital, New Delhi

Placenta accreta spectrum disorders (PAS) is a condition where the placental villi penetrate the decidual surface of myometrium with loss of plane of cleavage of the placenta. The term "Placenta accrete spectrum" includes placenta accreta, increta and percreta. It is one of the most important causes of maternal mortality and morbidity with mortality as high as 7%. Increased maternal morbidity is due to massive intrapartum or postpartum hemorrhage and its sequel (blood transfusions, coagulopathy, sepsis and multiorgan failure). Besides, it is currently the most common indication of emergency peripartum hysterectomy.

It occurs in approximately 1:1000 deliveries with a reported range from 0.04% to 0.9%. Its incidence has increased over the years and it seems to parallel the increasing caesarean delivery rate. Other risk factors associated are advanced maternal age, grand multiparity, placenta previa, previous curettage, submucous myoma, smoking, chronic hypertension and previous adherent placental disorders. The presence of previous caesarean delivery and placenta praevia increases the risk many fold and increases exponentially with the number of past caesareans.

Grey scale 2-D ultrasound is adequate in most cases for diagnosing the condition. However MRI may be required in some cases. All women with previous LSCS and anterior placenta Previa should be screened antenatally for the presence of this condition. Antenatal diagnosis is essential

for planning the treatment and results in better outcomes.

The cases which have been diagnosed in the preoperative period should be *managed in a tertiary care hospital which is equipped with a good blood bank, has an ICU set up and support of a multidisciplinary team* consisting of obstetricians who are adept at managing such cases along with efficient anesthesiologists, neonatologist, urologist, critical care intensivist, interventional radiologist or cardiologist, hematologist and nephrologist. This wide array of human resource required for optimum management of the case in itself reflects the critical nature of the condition and its potential complications.

The delivery in a case diagnosed as placenta accreta should be scheduled as an elective surgery. It is stressed here that the senior and most experienced team of obstetricians and anesthesiologists are absolutely essential to optimize the maternal outcome. The timing of delivery is individualized, however experts recommend delivery between 34-36 weeks so as to reduce the possibility of emergency surgery.

The standard surgical approach consists of planned preterm classical cesarean section followed by hysterectomy with placenta left in situ, without any attempt at manual removal of placenta. Partial cystectomy of urinary bladder may be required in case of placenta percreta. Hysterectomy has unacceptably high risk of hemorrhage or can cause injury to other visceral organs as bladder etc.

A conservative approach consists of preservation of the uterus with the placenta in situ or in cases of focal accreta where partial placental resection is done without hysterectomy. Conservative management or expectant management should be considered only for carefully selected cases of placenta accreta spectrum after detailed counseling about the risks, uncertain benefits, and efficacy and should be considered investigational.

Additional procedures (i.e. embolization or vessel ligation, temporal internal iliac balloon occlusion, methotrexate, hysteroscopic resection of retained tissues) have been used in a conservative approach with the placenta left in situ to decrease morbidity or to accelerate placental resorption

Conservative management necessitates long term monitoring. until complete

resorption of the placenta. The residual villous tissue in the uterine wall may require up to 6 months to be completely absorbed. In rare cases, a coagulopathy or septicemia may develop, requiring an emergent secondary hysterectomy. Measuring serum β-hCG on a weekly basis to check it falls continuously can reassure to some extent, but low levels do not guarantee complete placental resorption and so this should be supplemented by expert ultrasound imaging. There is insufficient evidence to recommend the use of MRI. Subsequent management usually requires weekly follow-up visits during the first 2 months and then in the absence of complications, monthly visits until complete resorption of the placenta. The follow-up consultation should include a clinical examination (bleeding, temperature, pelvic pain), pelvic ultrasound (size of retained tissue), and laboratory tests for infection (hemoglobin and leukocytes count, vaginal sample for bacteriological analysis).

When placenta accreta spectrum is encountered at the time of delivery without a prior suspicion or diagnosis and there are no extenuating circumstances mandating immediate delivery, anesthesia staff should be alerted, and the case should be temporarily paused until optimal surgical expertise can be garnered and one should never try to remove the placenta The senior most obstetrician should be summoned. If the delivering center lacks the expertise to perform a hysterectomy and the patient is stable after delivery of the fetus, the patient should be transferred to a facility that can perform the necessary level of care.

Hence it can be concluded that though PAS is a potentially life threatening condition, antenatal diagnosis, pre-operative planning and multidisciplinary approach can save the patient. In women where PAS is diagnosed unexpectedly during delivery, the most experienced staff should be summoned and if the centre is not equipped for handling the case, the patient should be safely and expeditiously transferred to a higher centre.

Caesarean Scar Ectopic Pregnancy

Dr Mala Srivastava
Senior Consultant & Robotic Surgeon, Institute of Obstetrics and Gynaecology, Sir Ganga Ram Hospital, New Delhi

Caesarean section scar ectopic pregnancy is a rare complication of pregnancy, occurring in approximately 1 in 2000 pregnancies. Its incidence is rising with the increase in primary and repeat caesarean sections. Globally, the incidence of primary caesarean section averages 18.6% of all births. The incidence of CS ectopic pregnancy varies from 1:1800 to 2216 pregnancies with rate of 0.15 % in women with previous caesarean section and 6.1% of all ectopic pregnancies. The caesarean scar ectopic pregnancy is usually diagnosed at the gestational age of 5–12 weeks with time interval between the last caesarean section and CS ectopic pregnancy being 6 months to 12 years. A scar ectopic pregnancy has also been reported following hysterotomy, myomectomy, uterine evacuation, previous abnormally adherent placentation, manual removal of placenta, metroplasty, hysteroscopy, and in vitro fertilization.

There are two types of caesarean scar ectopic pregnancies. Type 1 (endogenic) which develops in the myometrium and grows toward the uterine cavity, whereas type 2 (exogenic) which progresses exophytically toward the uterine serosa. Type 2 caesarean scar ectopic pregnancies have an ominous prognosis because they may result in spontaneous uterine rupture, haemorrhage, and maternal death.

It is possible that scar implantation occurs due to defects in the scar in the form of microtubular tract which develops due to poor healing of the previous trauma caused by caesarean section, dilatation and curettage, hysterotomy, myomectomy, abnormal placentation and manual removal of placenta. Scar ectopic pregnancy is different from that of an intrauterine pregnancy with placenta accreta. In placenta accreta, the absence of decidua basalis leads to varying degrees of invasion of the myometrium by trophoblastic tissues, but pregnancy is primarily in uterine cavity. In scar ectopic pregnancy, gestational sac is completely surrounded by myometrium and fibrotic tissue of the scar and is separated from the endometrial cavity.

Symptoms include pelvic pain and vaginal

bleeding in the first trimester. Many women are asymptomatic at diagnosis. The investigation of choice is transvaginal ultrasound (TVUS), which may be combined with a transabdominal scan for a panoramic view. In equivocal cases, magnetic resonance imaging (MRI) will confirm or refute the diagnosis. Treatment modalities are dependent on the case presentation. Women have been managed expectantly, medically with methotrexate, or surgically. Apart from surgical excision at hysteroscopy or laparoscopy or laparotomy, vacuum aspiration under ultrasound guidance can be used to remove the ectopic scar. Caesarean scar ectopic pregnancies are a rare presentation that may be difficult to diagnose and for which a management option may be hard to choose.

Scar ectopic pregnancy is a dangerous and complex disorder with increasing occurrence in recent years. Accurate early diagnosis and effective management are important to reduce maternal mortality and mortality.

Hysteroscopic Septal Resection

Dr KK Roy, Dr Rakhi Rai, Dr Anamika Das
All India Institute of Medical Sciences, New Delhi

Mullerian defects are heterogenous group of genital malformations. Though the exact incidence is difficult to determine, they are observed in 3-5% of general population but their frequency increases to 5-25% in women with recurrent miscarriages, late abortions and preterm deliveries. Septate uterus is the most common amongst these structural uterine anomalies. Septate uterus is the result of failure of absorption of partition between two fused Mullerian ducts thus dividing the cavity. It is associated with high pregnancy wastage, frequently exceeding 70%. The mechanism of bad reproductive outcome in these women is poorly understood but the mechanisms most commonly attributed to are poor septal blood supply leading to implantation failure and poor embryo growth and relative cervical insufficiency. Traditionally abdominal metroplasty was done but is associated with increased risk of adhesions impairing future fertility and birth by caesarean section. Hysteroscopic septal resection has now changed the

situation altogether. It is a safe, quick outpatient procedure, with reduced intraoperative & postoperative morbidity, decreased need of analgesia, reduced hospital stay and the patient can be given a trial of vaginal delivery, caesarean section being reserved only for obstetric reasons. Given the benefits of hysteroscopic septal resection, indications of septal resection has been changed. Now it can be considered for nulligravida women with long standing infertility or age > 35 years or those planned for IVF. However, whether it is a cause of infertility is debatable. Although there are no randomized control trials, several self control studies reported an increased pregnancy rate after metroplasty in unselected group of infertile patients ranging from 21 to 71%. It has been demonstrated that infertile patients with septate uterus and no other cause of infertility have significantly higher probability of conceiving after removal of septum than patients affected by unexplained infertility without uterine septum.

Edstrom in 1974 performed first hysteroscopic resection of uterine septum and in 1981, Chervenak and Neuwirth reported first successful reproductive outcome after hysteroscopic metroplasty.

The hysteroscopic septal incision can be carried out by scissors, resectoscope (unipolar/bipolar/ versapoint) or laser like Nd YAG laser/KTP with no added advantage of one technique over the other. Efficacy with respect to reproductive outcome remains same with all the techniques. Traditionally all operative hysteroscopic procedures have been combined with laparoscopy to observe uterine surface and to check the integrity of uterine wall during the procedure. However, data in the literature suggest that this does not reduce the risk of complications. We perform the operative hysteroscopic procedures without laparoscopic guidance with no increased complications. However laparoscopy was performed if desired to rule out bicornuate uterus if suspected, in cases with infertility and complicated cases. The major long term complication that all the surgeons try to avoid during resectoscopic surgery is postoperative adhesions. This can be prevented by placing a intrauterine physical barrier or by enhancement of endometrial growth by estrogens alone or estrogen- progesterone combination. We used to administer estradiol valerate 2mg

twice daily for 6 weeks postoperatively. Use of auto cross linked hyaluronic acid has also been studied but no study has evaluated fertility after these gels. Cervical laceration and uterine perforation are the known complication of hysteroscopic procedures. Usually perforation occurs at the fundus with no significant sequelae but requires stoppage of the procedure. In case of perforation, laparoscopy should be done and further management should be individualized. Heavy Intraoperative bleeding is usually rare due to avascular nature of the septum. Bleeding points can be coagulated with energy source simultaneously. Foley balloon can be used as a tamponade if needed. Postprocedural evaluation can be done by HSG/3D USG or hysteroscopy at 6 weeks. Residual septum can be dealt at second sitting. Fedele et al found that the reproductive performance is not altered by residual septum upto 1cm. More than 1cm residual septum needs to be removed at second sitting. Cervical length should be monitored during pregnancy and cervical circlage can be inserted depending upon TVS findings and should not be a routine procedure. We published a study on hysteroscopic septal resection in 170 patients and found that hysteroscopic metroplasty reduces the miscarriage rate from 91.5% to 12.9%, increased term delivery rate from 2.5% to 79.5% and decreases infertility rate to half from 15.1% to 6.6%. Cervical cerclage was required in 27 women based on ultrasound findings suggestive of cervical incompetence. 2 women had placenta accreta which is a rare complication of septal resection and 2 patients had uterine perforation, managed conservatively. Postoperative mild adhesions developed in 11 patients which was treated by adhesiolysis. It has been reported in literature that metroplasty reduces the rate of abortion from 80-90% to less than 20%, term delivery rate increases from 5 to >80% while the preterm delivery rate remains almost the same at 7%. Infertility rate could be reduced to less than half achieving a pregnancy rate of 56%. Therefore, the women with septate uterus and infertility with no other cause should be offered hysteroscopic metroplasty.

Hence, hysteroscopic metroplasty is a safe effective procedure which can be done on an outpatient basis. It should be offered to women with bad obstetric history in the form of recurrent abortions or preterm deliveries and infertility to improve their reproductive potential, although

randomised clinical trials are required to further prove its beneficial role.

Oral Paper & Poster Presentation

Abstracts

Oral Paper Presentation

Day 1: 23rd November, 2019

Session 1: Time: 08.30-9.30 hrs **Chairpersons:** Dr Deepali Garg, Dr Payal Chaudhry, Dr Nikita Kumari		
1	Labour Induction and Caesarean Delivery - A Retrospective analysis at a Tertiary Care Hospital	Sujata Das
2	Comparative evaluation of artificial rupture of membrane and spontaneous rupture of membrane on course of labor and feto-maternal outcome	Anjali Chauhan
3	Cerebro-placental and cerebro-uterine ratio in late fetal growth restriction	Ishita Agarwal
4	Effectiveness of antenatal pelvic floor muscle exercise in preventing stress urinary incontinence among primigravida during third trimester	Shabnam
5	Foetal Head Perineum Distance as Predictor of Vaginal Delivery in Term Nulliparous Women Undergoing Induction of Labour	Suchandana Das Gupta

6	A Prospective Randomized Control Study Of 'Early' Vs. 'Late' External Cephalic Version For Breech Presentation	Oshal Konge

Session 2: Time: 09.30 - 10.30 hrs **Chairpersons:** Dr Kiranjeet Kaur, Dr Juhi Bharti, Dr Nidhi Gupta		
1	Uterine artery PI and serum PAPP-A at 11 to 14 weeks of gestation as markers of preeclampsia	Zeba Khanam
2	Evaluation of maternal plasma platelet activating factor acetyl hydrolase activity in pre-eclampsia: A case control study	Preeti Gupta
3	Sonographic umbilical cord parameters as predictor of fetal outcome	Suvrata Garg
4	Evaluation of serum antioxidants and dietary antioxidants in Gestational diabetes mellitus	Neha Singh
5	Correlation of digital vaginal examination with transabdominal ultrasound to assess fetal head position during second stage of labour and prior to operative vaginal delivery	Manisha verma
6	Fetomaternal outcome in subclinical hypothyroidism in pregnancy	Jyoti Yadav

Session 3: Time: 10.30 - 11.30 hrs **Chairpersons:** Dr Alpana Aggarwal, Dr Deepika Meena, Dr Rajesh Kumari		
1	Comparison of TH1 and TH2 cells in unexplained repeated pregnancy loss.	Amrita Rathee
2	Tranexamic acid in prevention of blood loss during and after caesarean section	Urmila Sunda
3	Analysis of Preterm and Term stillbirths in a tertiary care hospital	Nishi Choudhary
4	Deep Vein Thrombosis following cesarean section	Priyanka Rani

5	Clinical study on presentation and management of ectopic pregnancies in a tertiary care centre	Saunri Hansadah
6	UTI after Caesarean Section in relation to duration of catheterisation	Anamika Bharti

Session 4: Time: 11.30 - 12.30 hrs **Chairpersons:** Dr Bani Sarkar, Dr Kishore Rajurkar, Dr Amita Jain		
1	Effect of subvaginal infiltration of diluted vasopressin or saline on intra-operative blood loss during vaginal hysterectomy for pelvic organ prolapse - a randomized controlled trial	Vinika Nimbodia
2	To evaluate the level of Adiponectin to Leptin ratio as a diagnostic marker in women with Polycystic Ovarian Syndrome and its association with Insulin Resistance	Pragya Mishra
3	Endocrine and Metabolic Profile of Different Phenotypes of Polycystic Ovarian Syndrome	Babita Kumari
4	Knowledge of cervical cancer, HPV infection and vaccine in nursing students and nursing staff in a tertiary care centre of North India	Archana Mishra
5	Pelvic Floor Muscle Strength in Nulliparous, Parous and postmenaopausal Females	Mily Pandey
6	Effect of vitamin D supplementation on serum VEGF levels in vitamin D deficient polycystic ovarian syndrome patients	Surbhi Suman

Session 5: Time: 14.00 - 15.00 hrs **Chairpersons:** Dr Pragati Divedi, Dr Uma Vaidyanathan, Dr Meenakshi Singh		
1	Weight gain in pregnancy and post cesarean wound complications	Abha Kiran

2	Evaluation of Vaginal pH as a Screening Tool for Bacterial Vaginosis and Impact of Screening and Treating for Bacterial Vaginosis on Preterm Births	Pallavi
3	Evaluation of postpartum urinary retention: a comparison between vaginal delivery and caesarean section	Sukanya Roy
4	Comparison of safety and efficacy of Iron sucrose vs oral iron therapy in moderate to severe anemia in pregnancy	Aakriti Batra
5	To study the feto-maternal outcomes in cases with previous surgical intervention for first trimester abortion.	Kritika Tanwar
6	Use of Vaginal Progesterone Inserts To Prevent Preterm Labor Rates In Women With Short Cervix	Divya Kumari

Session 6: Time: 15.00-16.00 hrs **Chairpersons:** Dr B Majhi, Dr Leena Wadhwa, Dr Neha Gupta		
1	Serum lactic acid in PAS for maternal outcome	P Goyal
2	Clinical profile and maternal outcome of postpartum patients requiring critical care	Monali Khergade
3	Study of Modified Myocardial Performance index in IUGR fetuses at 28-37 weeks	Karthiga
4	KAP about contraception in medical and paramedical Staff of hospitals.	Anubha Varshney
5	Thyroid Disorders in Pregnancy: Prevalence and Feto-maternal Outcome in A Tertiary Hospital of Delhi	Neha Bansal

Poster Presentation

Day 2: 24th November, 2019

Session 1: Time: 09.00 - 10.00 hrs
Chairpersons: Dr Bindiya Gupta, Dr Yukti Wadawan, Dr Karishma Thariani

S.No	Title	Presenter
1	A Rare case presentation of pseudo-meig syndrome	Komal Jadon
2	Mullerian duct cyst: a rare differential of ovarian cyst	Surbhi
3	OHVIRA syndrome (herlyn Werner wunderlich syndrome) "a rare entity"	Paridhi Gupta
4	An atypical presentation of leiomyoma	Aayushi Pal
5	Extraintestinal GIST as uterine leiomyoma	Inlo Muili
6	A Rare Case Report Of Sertoli Cell Tumour Of Ovary	Rasika Agarwal
7	Atypical leiomyoma of uterus:a case report	Kriti Bhakuni
8	Atypical presentation of mullerian agenesis	Chandrakanta Prasad
9	To determine diagnostic performance of saline infusion sonography and hysteroscopy for evaluation of endometrial lesions in postmenopausal bleeding	Shikha Bharti
10	Unusual Case of Episiotomy Myiasis- A Rare Case Scenario	Huma Ali

Session 2: Time: 10.00 - 11.00 hrs
Chairpersons: Dr Anshuja Singla, Dr Chintan Chaudhry, Dr Rajesh Ahlawat

S.No	Title	Presenter
1	Study of serial change in placental profile during pregnancy and its role in predicting hypertension in pregnancy.	Kirti Balyan

2	Anhydramnios-Knocking the Wrong Door	Anu Handa
3	A rare case report of placenta accreta without previa (clinical grade 3) in unscarred uterus	Swati Singh
4	A comparative study of dinoprostone vaginal pessary and dinoprostone intracervical gel for pre-induction cervical ripening	Saima
5	A Rare Case of Twin Pregnancy in the Noncommunicating Rudimentary Horn of Unicorn ate Uterus: A Case Report	Apurva Nain
6	Self-limiting fetal bradycardia associated with maternal evidence of dengue and chikungunya virus coinfection: a case report	Anupriya Narain
7	Takayashu Arteritis in pregnancy-Diagnosis and management	Ankita kumari
8	Feasibility of salpingectomy at the time of vaginal Hysterectomy	Ritu Singh
9	Silent rupture of unscarred uterus at 32 weeks: Case report	Dr Divya Solanki
10	Hook Effect in Choriocarcinoma	Dr Neha Malik

Oral Paper Presentation

Day 1: November 23rd, 2019

Session 1: 08:30 to 09:30 hrs

Chairpersons

Dr Deepali Garg, Dr Payal Chaudhry
Dr Nikita Kumari

Labour Induction and Caesarean Delivery - A retrospective analysis at a tertiary care hospital

Sujata Das, Achla Batra
Vardhman Mahavir Medical College
and Safdarjung Hospital, New Delhi

Introduction: Mode of delivery at first child birth largely determines the mode of delivery at subsequent births, so it is important to understand risk factors for caesarean delivery. In this study we will investigate the risk factors both in antepartum and intrapartum period for caesarean delivery among patients, primarily focusing on association of labor induction by dinoprostone gel and caesarean delivery.

Material and Methods: A retrospective observational study was conducted with singleton pregnancy in the Department of Obstetrics and Gynecology over the duration of three months that is from Aug 2019 to Oct 2019 with a total of 235 women who underwent caesarean section and women with obstetrical risk factors were analyzed focusing on how many women were induced for labor including the confounders of maternal characteristics and indication for induction of labor as well as intrapartum factors including cervical dilatation, labor augmentation and dysfunctional labor.

Results: Almost 32.8% women were induced for one or the other obstetrical indication. Women with induction of labor were more likely to deliver by caesarean section when we compare this group with those who came into spontaneous labor (17.1%). The intrapartum factors significantly mediated the association between IOL and caesarean delivery particularly cervical dilatation of <3cm and poor Bishop score.

Conclusion: Increased risk of caesarean delivery after IOL is mainly attributed to lower cervical dilatation and other associated obstetrical risk factors. These findings will help clinicians in decision making when induction of labor is important for the patients.

Comparative Evaluation of Artificial Rupture of Membrane and Spontaneous Rupture of Membrane on Course of Labor and Feto-Maternal Outcome

Anjali Chauhan, B Sarkar
ABVIMS, Dr Ram Manohar Lohia Hospital, New Delhi

Objective: To study the course of labor and feto-maternal outcome in patients with Artificial rupture of membrane and to compare them with Spontaneous rupture of membrane.

Method: It was Prospective interventional randomized comparative study including 120 primigravidae (randomized into ARM and SRM group with 60 patients in each) with cervical dilatation ≥3cm and intact membranes meeting the selection criteria. Amniotomy was performed in ARM group after enrollment while no intervention in SRM group. Outcomes were studied in terms of: Duration of labor, Mode of delivery, APGAR Score, NICU stay and Birth weight.

Result: There was significant reduction in the duration of labor in ARM group (p=0.0001). Mean duration of labor was 5.24 hours in ARM group compared to 6.94 hours in SRM group. There was no significant difference in the mode of delivery (p= 0.082). No significant adverse feto-maternal outcomes were seen with amniotomy. APGAR score, mean birth weight and NICU admission had no significant difference among the two groups.

Conclusion: ARM can be opted as an intervention with shorter duration of active phase of labour without adversely affecting the feto-maternal outcomes. It is safe, reliable and cost effective modality when employed in primigravida and may be considered as a low-cost accessible intervention to reduce prolonged labour and its associated complications.

Cerebro-placental and Cerebro-uterine Ratio in Late Fetal Growth Restriction

Ishita Agarwal, Shakun Tyagi
Maulana Azad Medical College & Lok Nayak Jai Prakash Hospital, Delhi

Objectives: To compare fetal Cerebroplacental (CPR) and Cerebrouterine Ratio (CUR) by USG Doppler in pregnancies with late Fetal Growth Restriction (FGR) and normal pregnancies and

correlate them with adverse perinatal outcome.

Methods: In this study, 50 women with pregnancy complicated by FGR and 50 normal pregnancies between 34-38 weeks period of gestation were evaluated by USG Doppler of Umbilical, Middle Cerebral and Uterine Artery, CPR and CUR were determined and correlated with perinatal outcome.

Results: FGR was associated with a significantly lower CPR ($p<0.00001$) and lower CUR ($p<0.00001$). Abnormal CPR was associated with increased need for induction of labor ($p<0.00001$), increased incidence of non-reassuring fetal heart rate ($p=0.000009$), APGAR below 7 ($p=0.0001$), Meconium Stained Liquor (MSL) ($p=0.0008$), NICU admission ($p<0.00001$) and prolonged hospital stay after delivery ($p<0.00001$). Abnormal CUR was associated with increased need for induction of labor ($p<0.00001$), emergency Caesarean section ($p=0.0006$), non-reassuring fetal heart rate ($p<0.00001$), APGAR below 7 ($p=0.00007$), MSL ($p=0.00004$), NICU admission ($p<0.00001$), and prolonged hospital stay after delivery ($p<0.00001$).

Conclusion: Both CPR and CUR were significant predictors of uteroplacental insufficiency which causes FGR. Both show significant correlation with adverse perinatal outcome. Uterine Artery Doppler was also found to be an important predictor of uteroplacental insufficiency in late FGR, in whom Umbilical Artery Doppler parameters are less reliable because the placental vascular defects are often too subtle to evoke a change.

Effectiveness of Antenatal Pelvic Floor Muscle Exercise in Preventing Stress Urinary Incontinence Among Primigravida During Third Trimester

Shabnam, Achla Batra
Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi

Objectives: 1. To compare the incidence of stress urinary incontinence (SUI) in third trimester in primigravida who performed pelvic floor muscle exercises (PFME) from 2nd trimester with those who received only routine antenatal care. 2. To compare pelvic floor muscle strength and quality of life in these two groups.

Methods: This was a case control study performed in all primigravida women attending ANC OPD. Two groups were made. Intervention group- taught to do pelvic floor muscle exercises from 2nd trimester onwards for at least 12 weeks. Control group-provided routine antenatal care.

Any difference in Incidence of SUI, Quality of life (QOL) in women with SUI, and pelvic floor muscle strength of both the groups were compared in third trimester.

Results: Women with SUI from intervention group had better QOL. Women of Intervention group had better pelvic floor muscle strength after doing PFME than controls. No significant difference was found in incidence of SUI between intervention and control group.

Conclusion: Supervised PFME could reduce incidence of SUI in pregnant patients. PFME helps in improving PFMS of women. Women with SUI who do PFME have better QOL.

Foetal Head Perineum Distance as Predictor of Vaginal Delivery in Term Nulliparous Women Undergoing Induction of Labour

Suchandana Dasgupta, Pratima Mittal
Rekha Bharti, Jyotsna Suri, M K Mittal
Divya Pandey
Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi

Objectives: To evaluate foetal head-perineum distance on transperineal ultrasound for prediction of vaginal delivery in nulliparous women undergoing induction of labour at term and to study the association of foetal head perineum distance with mode of delivery in these women.

Methods: A prospective observational study was conducted in Department of Obstetrics and Gynaecology, Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi in term nulliparous women with singleton pregnancy in cephalic presentation admitted to Obstetrics wards for induction of labour. Pre-induction Bishop's score and measurement of foetal head perineum distance on transperineal ultrasound were done in 300 women.

Results: The mean age of the women was 23.99 years and mean BMI was 23.76 kg/m^2. The mean foetal HPD by TPU in the study population was 3.92 cm. Among 300 women, 214 (71.33%) had normal vaginal delivery, 9(3%) had operative vaginal delivery and 77(25.67%) had caesarean delivery. The ROC cut off for HPD on TPU was ≤ 4.39 cm for successful vaginal delivery (95% CI 0.860 to 0.931, p <0.0001) with sensitivity, specificity, positive & negative predictive value and likelihood ratio of 97.76, 75.32, 92, 92.1 and 3.96 respectively.

Conclusion: Foetal head perineum distance on

TPU in term nulliparous women undergoing induction of labour is a good predictor of vaginal delivery.

A Prospective Randomized Control Study of 'Early' vs. 'Late' External Cephalic Version for Breech Presentation

Oshal Konge, Achla Batra
Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi

Objective: To determine if beginning ECV earlier than term i.e. at 34-36 weeks is more effective than beginning ECV at term i.e. beyond 37 weeks and to study the factors that predict successful outcome of ECV.

Method: Pregnant women with single live foetus in breech presentation at 34-35 weeks of gestation and willing to participate in the study were recruited. They were assigned randomly to 'Early' or 'Late' ECV group, after stratification for parity (nulliparous/ multiparous) using random number table. In 'Early' ECV Group (Group1) ECV was done at 34+0 to 35+6weeks and in 'Late' ECV Group (Group2) ECV was done at or after 37+0weeks.

Results: A total of 92 pregnant women were recruited in the study out of which final analysis was done for 38 women in 'early ECV' group and 42 women in 'late ECV' group. The success rate was higher in 'early' group compared to 'late' ECV group. There was 34% decrease in risk of non cephalic presentation in 'early' group (RR;95%CI 0.45;0.21-0.96, p=0.002). Success of ECV in early ECV group was associated with multiparity, lax abdominal tone and free floating breech (p=0.036, p<0.001 and p=0.002, respectively), whereas nonfrank breech, and easy palpability of head was associated with higher success rates in both 'early' and 'late' ECV groups. None of the women in 'early' or 'late' group went into preterm labour pains or had PROM. Transient foetal bradycardia was present in 5.3% women in 'early' ECV group and 16.7% women in 'late' ECV group, (p=0.159, RR; 95%CI, 0.35;0.07- 1.59).

Conclusion: ECV both 'Early' and 'Late' is a safe procedure, 'Early ECV' as compared to 'Late', has higher chance of success. Most significant predictors of success are free floating breech and easy palpable head followed by non frank breech.

Session 2: 09.30 - 10.30 hrs
Chairpersons
Dr Kiranjeet Kaur, Dr Juhi Bharti
Dr Nidhi Gupta

Uterine artery PI and Serum PAPP-A at 11 to 14 Weeks of Gestation as Markers of Preeclampsia

Zeba Khanam, Pratima Mittal, Jyotsna Suri
Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi

Introduction: To identify role of Uterine artery Doppler and serum PAPP-A at 11 to 14 weeks of gestation in prediction of preeclampsia.

Methods: A total of one hundred low risk nulliparous women, who were sure of dates and at 11 to 14 weeks of gestation were enrolled in our study. Bilateral Trans abdominal UtA-PI (Uterine artery Doppler Pulsatility Index) and serum PAPP-A (Pregnancy Associated Plasma Protein A) measurements were done. ROC curves were generated to find cut-off values for UtA-PI and serum PAPPA-A (expressed in multiples of medians, MoM) at 95%CI, which were ≥2.8 and ≤0.27MoM, respectively. Sensitivities, specificities, PPV (positive predictive values) and NPV (Negative predictive values) were calculated for each isolated and combined marker.

Result: The sensitivity, specificity, PPV and NPV for UtA-PI was 78%, 99%, 88% and 90%. For serum PAPP-A it was 44%, 96%, 50% and 95%. For the combined marker it was 44%, 100%, 100% and 95%.

Conclusion: UtA-PI measurement at 11 to 14 weeks of gestation was found to be very sensitive in predicting preeclampsia. Addition of Serum PAPP-A to UtA-PI did not increase overall sensitivity of the test, however increased its specificity. Hence UtA-PI with serum PAPP-A can serve as a useful aid in predicting preeclampsia.

Evaluation of Maternal Plasma Platelet Activating Factor Acetyl Hydrolase Activity in Pre-Eclampsia: A case control study

Preeti Gupta, Rachna Agarwal, Seema Garg
Gita Radhakrishnan, Alpana singh, Richa Agarwal
University College of Medical Sciences and Guru Teg Bahadur Hospital, Delhi

Objective: The aim of this study was to determine maternal plasma platelet activating factor acetylhydrolase activity in cases of pre-eclampsia and normal pregnant controls.

Methods: 2 ml of maternal plasma sample of 73 cases and 73 controls was taken in EDTA vials and analysed for PAF-AH activity and PAF-AH mRNA expression in pre-eclamptic cases and controls. PAF-AH activity was done by spectrophotometric assay and levels were estimated in nmol/min./ml. Total RNA was isolated using tri-reagent and cDNA was synthesised using reverse transcriptase, dNTPs, random hexamers and oligonucleotides. qPCR was carried out using specific primers and housekeeping gene. Relative expression was calculated by Δ DCT method and a fold change was calculated by $2^{-\Delta DCT}$. All the qualitative parameters were compared between the two groups by chi-square / Fisher's exact test and quantitative parameters by unpaired t-test.

Results: (1) Mean value of plasma PAF-AH activity among cases was 18.53±4.55nmol/min./ml which was statistically (p=0.039) higher than control group (17.11±3.665nmol/min/ml). (2) Mean value of plasma PAF-AH activity among severe PE (19.17±5.051nmol/min/ml) was higher than nonsevere PE (18.24±4.331nmol/min/ml) though not statistically significant (p=0.420) (3) mRNA expression of PAF-AH gene was similar between cases and controls as well as between severe and nonsevere preeclampsia (true fold change=1).

Conclusions: Results of our study suggested that increased PAF-AH activity may contribute to the pathophysiology of preeclampsia and its severity. Higher PAF-AH activity results in a lower plasma PAF level and ultimately a lower PAF could result in vasoconstriction, increased vascular resistance and decreased refractoriness to various pressor agents that result in hypertension.

Sonographic Umbilical Cord Parameters as Predictors of Foetal Outcome

Suvrata Garg, Pratima Mittal, Divya Pandey
Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi

Objective: This study was contemplated to establish sonographic correlation of umbilical cord thickness and cross sectional area in antenatal women with foetal outcome in terms of birth weight.

Methods: It was a prospective cohort study conducted on 180 antenatal women in third trimester. Cord thickness and cross sectional area was measured sonographically in free loop of cord. Lean Cord was considered if the value was below 10th percentile and Thick Cord when it was above 90th percentile. Foetal parameter was noted as birth weight. Statistical analysis was done thereafter. p value <0.05 was considered statistically significant.

Results: Positive significant correlation of lean cord thickness and area with low birth weight was observed. Sensitivity (75%), specificity (100%), PPV (100%), NPV (90%) and AUROC (0.85) of combined cord thickness and area were calculated for predicting LBW with p value<0.01. Among 180 cases, 8% had lean cord thickness and proportion of low birth weight (<2.5kg) were 18%. All of those detected with lean cord resulted in low birth weight neonates.

Conclusion: Sonographic correlation of umbilical cord thickness and cross sectional area in third trimester of pregnancy with foetal outcome was found to be positively significant Thus, it can be concluded that antenatal umbilical cord characteristics should be incorporated in routine antenatal ultrasound for prediction of LBW.

Evaluation of Serum Antioxidants and Dietary Antioxidants in Gestational Diabetes Mellitus

Neha Singh, Himsweta Srivastava
University College of Medical Sciences and Guru Teg Bahadur Hospital, Delhi

Objective: To evaluate serum antioxidant status and dietary antioxidants in gestational diabetes mellitus (GDM).

Methods: GDM and non GDM women (n=30) were recruited from ANC OPD, preconceptionally dietary intake of antioxidants was calculated and 4 ml blood sample was collected and Total Antioxidant Capacity (TAC) & Mt DNA copy number was measured.

Results: The mean value of Total antioxidant capacity (TAC) in GDM and non-GDM women at 24-28weeks was 3.82±0.72 and 3.35±0.78, p=0.01. The mean TAC levels in GDM women at 24-28 weeks gestation was 3.82±0.78 and at 37 weeks 4.20±1.15, p=0.047. The mean value of dietary intake of vitamin E (18.33±2.00 vs 34.36±2.10, p <0.001), Zinc (11.63±0.75 vs 20.49±0.95, p<0.001) vitamin C (220.45±3.55 vs 231.1±4.31, p<0.001) and ß-carotene (912.83±11.17 vs 977.27±21.69, p<0.001) were significantly lower in women with GDM than healthy pregnant female. The mean mitochondrial DNA copy number in GDM women was 263.56±100.99 vs 232.21±108.86 in non-GDM women.

Conclusion: Levels of serum Total antioxidant capacity (TAC) at 24-28 weeks was significantly higher in women with GDM than without GDM. Preconceptional dietary intake of Vitamin E, vitamin C, Zinc and ß-carotene was significantly less in women with GDM than without GDM. The Mt DNA copy number was higher in GDM than non GDM women.

Correlation of Digital Vaginal Examination with Transabdominal Ultrasound to Assess Foetal Head Position During Second Stage of Labour and Prior to Operative Vaginal Delivery

Manisha Verma, Pratima Mittal Sumitra Bachani, Jyotsna Suri, Rekha Bharti

Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi

Introduction: The foetal head position (FHP) in active labour traditionally determined by digital vaginal examination (DVE) has been shown to be subjective with poor reproducibility. Transabdominal ultrasound (TAS) is being increasingly used for determining FHP and descent in active labour. This study aimed to compare TAS with DVE for determining FHP during second stage of labour and prior to instrumental vaginal delivery.

Methods: A prospective observational study conducted at Safdarjung Hospital. 335 low risk primigravida with term pregnancy, singleton foetus in vertex presentation were recruited. DVE followed by TAS was done for assessment of FHP in second stage of labour and prior to operative vaginal delivery, each investigator respectively blinded to other's findings. Duration of second stage of labour, mode of delivery, postpartum complications, neonatal weight and APGAR score were recorded. Statistical analysis was

done using SPSS version 21.0. Inter rater kappa agreement was used to find out strength of agreement between two methods. A p value of <0.05 was considered statistically significant.

Results: DVE in second stage of labour correctly identified FHP in 278 (82.99%) as occiput-anterior position. In 29 (8.66%) of observations the FHP could not be determined due to presence of caput succedaneum or moulding. There was absolute correlation between DVE and TAS in 222 (66.27%) observations and was highest in occiput-anterior position. DVE failed to determine correct foetal head position in 30% occiput-anterior positions prior to instrumental delivery with kappa showing poor concordance.

Conclusion: FHP can be misdiagnosed by DVE in the presence of caput succedaneum and moulding. TAS should be used to confirm FHP in second stage of labour where DVE result is undetermined. TAS should be done prior to instrumental delivery to facilitate correct application and prevent intrapartum complications.

Fetomaternal Outcome in Subclinical Hypothyroidism in Pregnancy

Jyoti Yadav, Pushpa Singh
ABVIMS, Dr Ram Manohar Lohia Hospital, New Delhi

Objective: To study the effect of subclinical hypothyroidism on fetomaternal outcome.

Methods: A prospective observational study was conducted in ABVIMS and Dr. RML Hospital, New Delhi from November 2017 to March 2019. We studied 50 subclinical hypothyroid pregnant females (Group-A) and 50 euthyroid pregnant (Group-B) females. fT3, fT4 and TSH levels were measured in each trimester in both groups and tablet levothyroxine started accordingly in subclinical hypothyroid females. Obsteric and perinatal outcomes were noted in both the groups.

Results: In our study, Antenatal complications were higher in SCH pregnant females than euththyroid pregnant women.PIH (4% vs 2%), GDM (10% vs 2%), Oligohydramnios (12% vs 6%), preterm delivery (12% vs 4%), Operative delivery (38% vs 30%), PPH (10% vs 12%), IUGR (34% vs 28%) and LBW (30% vs 26%) in two groups respectively. There was significantly higher incidence of anemia, IUGR and congenital anomalies in uncontrolled SCH women.

Conclusion: Testing of thyroid profile is essential in every trimester for timely diagnosis and initiation of treatment. Strict monthly monitoring of thyroid profile and adjustment in dose of levothyroxine should be done to reduce the risk of fetomaternal complications.

Session 3: 10.30-11.30 hrs
Chairpersons
Dr Alpana Aggarwal, Dr Deepika Meena
Dr Rajesh Kumari

Comparison of Th1 and Th2 Cells in Unexplained Repeated Pregnancy Loss

Amrita Rathee, Renu Arora
Vardhman Mahavir Medical College
and Safdarjung Hospital, New Delhi

Objective: To compare T helper cell 1 (Th1) and T helper cell 2 (Th2) in the decidua of women with repeated pregnancy loss (RPL), at the time of miscarriage with the decidua of women, at the time of induced abortion.

Methods: Women presenting to the hospital with signs of abortion requiring surgical evacuation, with history of previous one or more spontaneous abortions were enrolled as cases (36/73). Patients undergoing surgically induced termination of pregnancy were taken as control (37/73). The decidua thus obtained was subjected to histopathology and immunohistochemistry staining for Th cells.

Results: Among 36 women in study group, 16 had primary RPL (44.44%), however 55.56% had secondary RPL. The Th1 cell was present in 43.75% of primary RPL women, whereas Th2 was present in just 12.50%. However in secondary RPL cases, 35% women had Th1 cells present, 45% had Th2 cells. The Th1 cells were found to be positive in 25% women in cases and 29.73% women in controls group whereas Th2 cells were positive in 16.67% women in cases and 8.11% in control group.

Conclusion: Th2 cells in spite of being more in secondary RPL when compared to primary RPL were not protective against a subsequent miscarriage. However a larger study may be required to rule out the immunological cause in secondary RPL. No difference in Th1 and Th2 cells in the decidua of patients undergoing recurrent abortion when compared to women undergoing medical termination of pregnancy. Therefore, routine screening for immunological factors and cytokine testing is not recommended.

Tranexamic Acid in Prevention of Blood Loss During and after Caesarean Section

Urmila Sunda, Priyanka Bhadana
Veena Ganju Malla
ABVIMS, Dr Ram Manohar Lohia Hospital, New Delhi

Objective: To find the efficacy and safety of tranexamic acid (TXA) in prevention of blood loss during and after caesarean section.

Methods: This study was done in department of OBGY in Dr. RML Hospital during the period of June 2019 till October 2019. Women who required lower segment caesarean section (LSCS) in RML Hospital were enrolled. A total of 100 women were included in this study out of them fifty women received tranexamic acid 1 gram diluted in 100 ml normal saline intravenously immediately before the surgery and compared with 50 other women who have not received tranexamic acid before surgery. Hemoglobin level was measured before caesarean section and two days after surgery as per existing unit protocol. Base line demographic data, liver and renal functions were recorded in both the groups. Mean fall in Hemoglobin was compared using t-test with significance at $p < 0.05$.

Results: In this study, it was found that group who received tranexamic acid had reduced blood loss from delivery to 2 days postpartum. The mean fall of hemoglobin was significantly less in the tranexamic acid receiving group (1.2 g/dl) in comparison to control (1.8 g/dl) ($p < 0.05$). No complications or side-effects were reported in either group. No adverse neonatal outcome was noted in either group.

Conclusion: It was concluded from our study that tranexamic acid reduces blood loss during and after the lower segment caesarean section and its use was not associated with any adverse effects. Tranexamic acid can be used safely and effectively in women undergoing lower segment caesarean section.

Analysis of Preterm and Term stillbirths in a Tertiary Care Hospital

Nishi Chaudhary, Pratima Mittal
Harsha S Gaikwad
Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi

Objective: To collect data on epidemiological profile and to assess the risk factors and causes of term and preterm stillbirths.

Methods: This was a prospective observational

study done under WHO-SEARO project after ethical clearance. This study included all stillbirths occurring in Safdarjung hospital from August 2015 to December 2018. Verbal autopsies were done and thorough antenatal records were documented and analyzed.

Results: Out of 1,09,578 deliveries, 2689 were the stillbirths (2.4%). Among these, 1588 (59 %) were preterm stillbirths (< 37 weeks), whereas 1101 (40.9%) term stillbirths. In both groups, most pregnancies were unbooked and unsupervised. The mean maternal age was 26±4 years, whereas mean body mass index (BMI) was 24.2 kg/m^2. Significantly lower percentage of patients had iron-folic acid intake; significantly higher percentage had anemia, hypertension, diabetes and antepartum hemorrhage. Among maternal causes, hypertension (26.5%), abruption (23.8%) and infection (4.1%) were the leading causes in preterm stillbirths. Maternal factors contributed in significantly higher percentage of preterm stillbirths as compared to late stillbirths. Intrauterine growth retardation was found significantly more in preterm stillbirths (26.8%) as compared to term stillbirths (19.3%). Intrapartum stillbirths (fresh stillbirths) constituted 42.9% of total term stillbirths and 36.7% of preterm stillbirths. Cord complications (20.3%), obstructed labour (3.8 5%) and birth defects (6.7%) were significantly higher term still birth. Approximately, 89% patients with stillbirth had delayed seeking of health care facility.

Conclusion: The most common cause of stillbirth was hypertension in this cohort. Most intrapartum deaths were term stillbirths. Reducing these factors might reduce the prevalence of stillbirth. Accountability for high quality antenatal care and care at birth needs to use antepartum and intrapartum stillbirth as core indicators.

Deep Vein Thrombosis Following Cesareans Section

Priyanka Rani, Achla Batra
Vardhman Mahavir Medical College
and Safdarjung Hospital, New Delhi

Objectives: 1) To find the incidence of deep vein thrombosis following caesarean section, using duplex ultrasound scan. 2) To study the risk factor profile for thrombosis in women who had cesarean section.

Methods: Prospective cohort study conducted in SJH (1 yr). 510 women, meeting inclusion & exclusion criteria were included in the study.

Result: Overall incidence of DVT among women undergoing elective/emergency caesarean section was 1/ 510 (1.99 per 1000); 1/427 (2.34 per 1000) among women undergoing emergency C/S in labor.

Conclusion: 60 low risk women having elective

section with no risk factors would not have required prophylaxis of any kind.451 Moderate risk women (emergency caesarean and elective with risk factors) would be given LMWH to prevent 1 case of DVT.

Clinical Study on Presentation and Management of Ectopic Pregnancies in a Tertiary Care Centre

Saunri Hansadah, Anjum Ara, Indu Chawla
ABVIMS and Dr Ram Manohar Lohia Hospital, New Delhi

Introduction: Ectopic pregnancy means pregnancy outside the normal uterine cavity. It is the leading cause of maternal morbidity and mortality in first trimester. Early diagnosis and timely intervention can significantly improve the outcomes.

Methods: Retrospective observational study done in the Dept. of Obstetrics and Gynecology ABVIMS and Dr. RML hospital, New Delhi from January 2016 to March 2019. Case records of 76 patients of confirmed ectopic pregnancy were retrieved and studied from the medical record section of our hospital. The main aims were to see the clinical presentation, mode of diagnosis, predisposing risk factors; treatments offered and associated morbidity and mortality.

Results: The incidence of ectopic pregnancy in present study was 1.7%, highest being in 21 to 30 years age multiparous patients. 85.1% presented as acute emergencies. 75% patients had classic triad of amenorrhea, pain and bleeding. Pain was the commonest symptom in 96.1%. The commonest clinical sign was adnexal mass and tenderness. Ultrasound findings had adnexal mass in 98.7% and free fluid in 84.7% cases with empty uterus in 100%. 90.7 % case were tubal ectopic and 69.73 % were ruptured. Surgery was the main treatment modality in 96.0% cases. Salpingectomy was the commonest surgery done in 80.25%. There was 0% mortality and 78.9% cases required blood transfusions. 44.7% patients had no known risk factors whereas some of the common identifiable risk factors were history of previous abortion, previous pelvic surgeries and pelvic inflammatory disease.

Conclusion: ABVIMS and Dr. RML hospital is a tertiary care center so most of the patients of Ectopic pregnancy presented late, as such surgery was the main treatment modality but there was 0% mortality in our study. Conservative treatments such as laparoscopy and medical management can also be offered to hemodynamically stable patients.

UTI after Caesarean Section in Relation to Duration of Catheterization

Anamika Bharti
Vardhman Mahavir Medical College
and Safdarjung Hospital, New Delhi

Objective: To estimate the occurrence of UTI, urinary retention, ambulation time and symptoms of lower UTI after removal of catheter in post C.S patient.

Methods: It is a prospective, observational study and was carried out in the department of Obstetrics and Gynaecology, VMMC and Safdarjung Hospital. A total of 200 eligible women were recruited who were undergoing C.S. A preoperative urine sample was taken and sent for routine, microscopy, culture and sensitivity, before administering antibiotics anaesthesia and surgery. A Second sample taken after 48 hours of urinary catheter removal for urine culture and microscopy and was entered in MS EXCEL sheet and were analyzed.

Results: E. coli was most common organism identified on urine culture and incidence of UTI was more with increasing duration of indwelling catheterization.

Conclusion: Non-use of urinary catheter associated with significantly low rate of UTI, less first voiding discomfort and early ambulation.

Session 4: 11.30 - 12.30 hrs
Chairpersons
Dr Bani Sarkar, Dr Kishore Rajurkar
Dr Amita Jain

Effect of Subvaginal Infiltration of Diluted Vasopressin or Saline on Intra-Operative Blood Loss During Vaginal Hysterectomy for Pelvic Organ Prolapse - A RCT

Vinika Nimodia, Sandhya Jain Shalini Rajaram, Asha Tyagi, Bindiya Gupta
University College of Medical Sciences
and Guru Teg Bahadur Hospital, Delhi

Objectives: Vaginal hysterectomy is frequently performed gynaecological surgery. The aim of study was to compare submucosal vasopressin vs saline infiltration during vaginal hysterectomy and assess surgical parameters i.e. intraoperative blood loss, post infiltration vitals, ease of

dissection, use of electrocautery, need of blood transfusion and complications.

Methods: This randomized controlled trial was done in department of Obstetrics and Gynaecology in collaboration with department of Anaesthesia from November 2017 to April 2019. Low risk women aged <65 years with POP-Q stage III/IV prolapse were recruited from Out Patient Department. They were randomized into two groups. Group I (n=35) patients received submucosal infiltration with diluted vasopressin (40ml vasopressin of 0.1U/ml, total 4U), prior to the incision. Group II (n=35) patients received 40cc of normal saline. Vitals were checked at 1 and 5 min post infiltration.

Results: The mean estimated blood loss from incision till creation of flaps was half in vasopressin group as compared to saline group (21.33ml vs 49.67ml, p=0.001). Vasopressin group had less use of electrocautery, whereas ease of dissection was more in saline group. There was no significant difference in duration of surgery till flap creation and need of blood transfusion. There was fall in pulse rate and blood pressure in both groups which did not require medical intervention and was likely due to neuraxial anaesthesia.

Conclusion: Vasopressin appears to be safe and effective in vaginal hysterectomy at infiltration dose of 4 units in dilution. However further studies on larger sample size are recommended to gather more evidence in this regard.

To Evaluate the Level of Adiponectin to Leptin Ratio as A Diagnostic Marker in Women with Polycystic Ovarian Syndrome and Its Association with Insulin Resistance

Pragya Mishra, Pratima Mittal, Rekha Bharti

Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi

Objectives: To evaluate Adiponectin, leptin and Adiponectin to Leptin ratio (A/L ratio) in women with PCOS and find out its association with insulin resistance.

Methods: It was a Hospital based Cross sectional study, conducted at outpatient clinic of Department of Obstetrics and Gynaecology in collaboration with department of Biochemistry, Safdarjung Hospital, New Delhi. Total of 120 women were recruited, 60 women with PCOS and 60 women without PCOS who presented after the index case in OPD. Fasting blood sugar, OGTT, fasting serum Insulin, and Serum levels of Adiponectin and Leptin levels were measured.

Insulin resistance was calculated by HOMA-IR. Main outcome measures were Adiponectin to Leptin ratio as a potential biomarker for PCOS.

Results: PCOS women had significantly lower serum Adiponectin & higher serum Leptin level and lower Adiponectin to Leptin ratio compared to non PCOS women. 2.15±3.07 ng/ml vs 10.7±27.91 ng/ml, p<0.0001; 24.25±16.5ng/ml vs 13.89±11.19ng/ml, p=0.0003 and 0.15±0.24 vs 3.03±15.04, p<0.0001 respectively. There was no significant correlation found between A/L ratio and insulin resistance.

Conclusion: The levels of Adiponectin, leptin A/L ratio are altered in PCOS women however, there is no correlation of A/L ratio with insulin resistance.

Endocrine and Metabolic Profile of Different Phenotypes of Polycystic Ovarian Syndrome

Babita Kumari, Pikee Saxena
Lady Hardinge Medical College
& Smt. Sucheta Kriplani Hospital, New Delhi

Objectives: To determine the prevalence of four phenotypes of PCOS and to evaluate their endocrine and metabolic parameters including insulin resistance and metabolic syndrome with respect to controls.

Methods: This observational, case–control study was conducted in the gynaecology outpatient department of a tertiary care centre where 161 PCOS and 50 non-PCOS women were recruited and investigated.

Results: All phenotypes of PCOS had higher BMI with respect to controls (P\0.000). Overweight women were maximum in phenotype H+ O followed by phenotype H+ P. Significantly higher levels of luteinizing hormone (P\0.01), testosterone (P\0.0001), were observed in all phenotypes of PCOS as compared to controls. Serum cholesterol (P\0.026) and triglycerides (P\0.05) were significantly higher in all PCOS phenotypes compared to controls. Levels of fasting (P\0.000) and post-prandial (P\0.009) insulin were significantly higher in all phenotypes of PCOS with respect to controls. Mean insulin resistance (IR) was 24.09% in PCOS and 2 % in controls, prevalence being highest in H+ O phenotype followed by H + O + P. Prevalence of metabolic syndrome in women with PCOS was 36.02%, being highest in H + O + P followed by H + O and that of control was 10%.

Conclusion: All phenotypes of PCOS had deranged endocrine and metabolic profile compared to controls, but prevalence of IR and metabolic syndrome was maximum in hyperandrogenic phenotypes which require

a strict surveillance for prospective metabolic disorders as compared to O+ P phenotype.

Knowledge of Cervical Cancer, HPV Infection and Vaccine in Nursing Students and Nursing Staff in a Tertiary Care Centre of North India

Archana Mishra, Ruchi Hooda
Swati Gupta, Sunita Malik
Vardhman Mahavir Medical College
and Safdarjung Hospital, New Delhi

Objective: Present study is undertaken to assess the knowledge of cervical cancer screening, HPV infections, and HPV vaccination in nursing students and nursing staff.

Methods: A total of 500 of nursing students and nurses were interviewed with the help of restructured questionnaire.

Results: Most of the nursing students had adequate knowledge about cervical cancer and screening followed by Staff nurses. Knowledge of HPV infection and vaccine is adequate in 90 % of the nursing students and 75% nursing staff. Only 10 % of staff nurses actually had a PAP Smear and only 0.5% repeated in 3 years.

Conclusions: We concluded that Healthcare employees should be involved in all the cervical cancer awareness programs initiated by hospital. If properly informed Hospital staff could be a useful link for spreading information from heath care systems to general public.

Pelvic Floor Muscle Strength in Nulliparous, Parous and Postmenaopausal Females

Mily Pandey
Vardhman Mahavir Medical College
and Safdarjung Hospital, New Delhi

Objective: To evaluate and compare pelvic floor muscle strength in nulliparous, parous and postmenopausal women by subjective method, Modified oxford Scale (MOS) as well as objective method (Perineometer).

Methods: This was a cross sectional study A total of 300 women were recruited from Gynaecology and Family welfare outpatient departments and divided into three groups - 100 nulliparous women, 100 premenopausal parous women and 100 postmenopausal women. Pelvic floor muscle strength assessment was done in eligible

women willing to participate in study using digital palpation and peritron perineometer.

Results: Mean MOS in nulliparous, premenopausal parous and postmenopausal women was 4.66, 3.9 and 2.6 respectively. Age had an important influence on pelvic floor muscle before menopause but after menopause it is years of menopause which has significant negative impact on PFMS and not age. BMI influence on pelvic floor muscle in nulliparous, premenopausal parous and postmenopausal women could not be established as none of women was very obese In parous women both premenopausal and menopausal, Mode of delivery, history of prolonged labour had no impact on PFMS, Increasing parity was associated with reduction in pelvic floor muscle strength.

Conclusion: Pelvic floor muscle strength decreases after child birth and is further decreased after menopause.

Effect of Vitamin D Supplementation on Serum VEGF Levels in Vitamin D Deficient Polycystic Ovarian Syndrome Patients

Surbhi Suman, Alpana Singh
University College of Medical Sciences and Guru Teg Bahadur Hospital, Delhi

Objectives: To estimate and compare serum VEGF levels before and after vitamin D supplementation in vitamin D deficient PCOS patients.

Methods: Vitamin D deficient PCOS women (n=30) were recruited from Gynaecology OPD, 4 ml of blood sample was collected before and after vitamin D supplementation and serum VEGF levels were measured. The study subjects received vitamin D 60,000 IU once weekly for 8 weeks.

Results: We observed a fall in serum VEGF levels in study population (n=26) post vitamin D supplementation, from pre supplementation mean of 773.547±344.173 to 639.97±119.02 pg/ml which was statistically significant (p value 0.004). A negative correlation was observed between serum vitamin D and serum VEGF both pre supplementation (-0.6160) and post vitamin D supplementation (-0.8925) which proves there is an inverse relation between serum vitamin D and serum VEGF. Also found significant improvement in clinical and biochemical parameters in PCOS subjects after vitamin D therapy.

Conclusion: Vitamin D supplementation decreases serum VEGF levels in Vitamin D deficient PCOS women thereby improving clinical and biochemical parameters.

Session 5: 14.00-15.00 hrs
Chairpersons
Dr Pragati Divedi, Dr Uma Vaidyanathan
Dr Meenakshi Singh

Weight Gain in Pregnancy and Post-Cesarean Wound Complications

Abha Kiran, Priyanka Bhadana, Veena Ganju
ABVIMS and Dr Ram Manohar Lohia Hospital, New Delhi

Background: Obesity is emerging as new epidemic along with hypertension and diabetes. Obesity affects all age group females and affect their physiology. Obesity in pregnancy affects antepartum, intrapartum and postpartum period. Wound infection in obese patient has been extensively studied. In india there is uprising in number of obese people becoming pregnant and along with it the complication associated.

Methods: In this retrospective cohort study post cesarean wound infection in obese patient has been extensively studied.

Results: 13.9% of patient with BMI≥50 had GDM whereas only 3.3% patient with BMI< 30 had GDM. 6.97% of patient with BMI≥50 had preeclampsia whereas only 4.05% patient with BMI< 30 had preeclampsia. 55% of patient with BMI>50 underwent repeat cesarean section in comparison to 37.16% with BMI<30. Post cesarean wound complication in patients with BMI< 30, 30 -30.99, 40-40. 99 and ≥50 were 6.7%, 9.0%, 17.2% and 23.2% respectively.

Conclusion: Post cesarean wound complication were significantly associated with midline vertical incision estimated average blood loss ($p<0.01$), operative time ($p<0.01$) and subcuticular closure of skin ($p<0.01$).

Evaluation of Vaginal Ph as a Screening Tool for Bacterial Vaginosis and Impact of Screening and Treating for Bacterial Vaginosis on Preterm Births

Pallivi, Achla Batra
Vardhman Mahavir Medical College & Safdarjung Hospital, New Delhi

Objective: To evaluate effectiveness of vaginal pH as a tool to screen for Bacterial Vaginosis in

early second trimester and study the impact of treatment in reducing preterm delivery.

Method: A total of 440 pregnant women between 16-18 weeks of gestation who did not have complaint of vaginal discharge were randomly assigned to a study group and control group. The study group was screened for BV by vaginal pH and diagnosis was confirmed by gram staining using Nugents criteria. BV positive women were treated with metronidazole. The control group was not screened. Both groups were managed as per hospital protocol and were followed till delivery. The maternal and fetal outcomes of pregnancy, delivery and postpartum were recorded.

Results: Vaginal pH > 4.5 had a sensitivity of 100% and a specificity of 76.5%, PPV was 22.8% while NPV was 100% in diagnosing bacterial vaginosis. The prevalence of BV was found to be 6.4%. There was absolute risk reduction of 6.2% in preterm deliveries and 5.6% in PPROM. There was not much difference in birth weight between the two groups. The absolute risk reduction in neonatal respiratory complications was 4.4%.

Conclusions: Vaginal pH was found to be an effective tool for screening for BV. Treating asymptomatic BV decreases preterm births, PPROM and neonatal respiratory complications.

Evaluation of Postpartum Urinary Retention: A comparison between vaginal delivery and caesarean section

Sukanya Roy, Monika Gupta
Vardhman Mahavir Medical College
and Safdarjung Hospital, New Delhi

Objective: To evaluate occurrence of urinary retention in postpartum period in women undergoing vaginal delivery as compared to those undergoing caesarean section and determine the obstetric risk factors associated with it.

Methods: An observational prospective study was done including 360 women delivering in the department of Obstetrics and Gynaecology in a tertiary care hospital in New Delhi, divided into vaginal delivery (VD) group and caesarean section (CS) groups with 180 women in each. Postpartum urinary retention (PPUR) was evaluated by Bladder scanner by measuring post void residual bladder volume (PVRBV) in the immediate postpartum period. PVRBV value of 150 mL was taken as cut off for labelling covert PPUR. All women were followed up and re-evaluated at 1 and 3 months postpartum.

Results: A significant difference was found in the incidence of immediate postpartum

urinary retention between the CS and the VD groups; 12.78% (23 out of 180) in the CS group as compared to 5.56% (10 out of 180) in the VD group with a p-value of 0.018 (< 0.05). Prolonged duration of first stage of labour was found to be a significant risk factor for immediate PPVD in the vaginal delivery group (11.9 ± 2.96 with p-value=0.046). Women in the CS group who developed PPUR were operated for indications like failed induction/ protracted labour and had longer duration of surgery (77.045 ± 4.81 mins). None of the patients in our study group who had come for follow up at 6 weeks and 3 months had persistent PPUR.

Conclusion: Women with Caesarean section are at higher risk of covert PPUR than those delivered by vaginal delivery during their early postpartum period. Prolonged first stage of labour, emergency caesarean section, indications for emergency caesarean sections and duration of surgery are the independent obstetric factors associated with immediate PPUR.

Comparison of Safety and Efficacy of Iron Sucrose vs Oral Iron Therapy in Moderate to Severe Anemia in Pregnancy

Aakriti Batra
Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi

Objectives: To compare the safety and efficacy of oral iron vs intravenous iron sucrose in treatment of moderate to severe iron deficiency anemia.

Methods: This prospective randomised control trial was conducted for a period of 1 year. A sample size of eighty patients in each group was calculated with power of 90% with alpha error of 5%. A total of 150 patient in oral group and 100 in IV iron were recruited to take care of lost to follow up. Pregnant women between 20-28 weeks pregnancy, with established iron deficiency anemia and haemoglobin between 6-9 gm% were included. Women with allergic disorders, bleeding disorders or history of blood transfusion in pregnancy were not included. Oral group was give ferrous fumerate 100mg twice a day and for IV group the total dose of iron sucrose was given after calculation. All women were followed after 4weeks and after delivery.

Results: The rise in haemoglobin in both groups was not statically different. Rise in serum ferritin was higher in IV group. Severe adverse effects were similar in both groups but non severe side effects wee higher in oral group. There was a significant decrease in blood transfusions in IV group.

Conclusion: Both oral iron and IV iron sucrose

are safe and effective option in iron deficiency anemia of pregnancy. IV iron has added benefit of higher increase in iron stores and decrease in need for blood transfusion.

To Study The Feto-Maternal Outcomes in Cases with Previous Surgical Intervention for First Trimester Abortion

Tanwar Kritika, Sarkar Bani
ABVIMS and Dr Ram Manohar Lohia Hospital, New Delhi

Objectives: To study the feto-maternal outcome in cases with previous surgical intervention for first trimester abortion on subsequent pregnancy and to compare with cases without history of previous abortion.

Methods: A Cross sectional observational study was conducted over a period of two years. Study included 80 consenting females at 28 weeks POG. Females with history of prior surgical abortion just before the present pregnancy were included as cases (n=40) and rest as controls (n=40). Detailed obstetric history was taken, subjects were then followed till delivery and feto-maternal outcomes such period of gestation, mode of delivery birth weight, Apgar score, NICU stay at the time of delivery were recorded and analyzed.

Results: We observed that the women with history of induced surgical abortion were at increased risk of Pre term birth (52.5%, p value0.006), Cesarean section (40%, p value 0.012), Low birth weight (47.5%, p value <0.001), NICU stay (32.5%, p value 0.027) compared to primigravida controls.

Conclusion: We concluded that women with previous history of induced surgical abortions were at increased risk of preterm birth, very preterm birth and low birth weight babies, NICU stay in the subsequent pregnancies. The risk of caesarean was found to be increased in women with previous induced abortions exposing the women to the morbidity associated with the C-section. Hence clinician should be more vigilant with history of prior surgical first trimester abortion.

Use of Vaginal Progesterone Inserts to Prevent Preterm Labor Rates in Women with Short Cervix

Divya Kumari
ABVIMS and Dr Ram Manohar Lohia Hospital, New Delhi

Background: Women with sonographically short cervix midtrimester are at increased risk of preterm delivery. The study was undertaken to evaluate the efficacy of vaginal progesterone inserts in prevention of preterm births in sociographically short cervix.

Methods: This was randomized double blind placebo controlled study that included asymptomatic women and singleton pregnancy and sonographic ally short cervix at 16 to 23+6 weeks. Women were allotted randomly to receive vaginal progesterone inserts or placebo daily from 16 weeks to 36+6 weeks, rupture of membrane or delivery whichever occurred earlier.

Results: Of 100 women 60 were given vaginal inserts and 60 were given placebos. Women who received vaginal progesterone inserts had lower rate of preterm births before 34 weeks than those allotted to placebos, 8% vs 16%. Vaginal progesterone was associated with significant reduction in rate of preterm birth 5% vs 10%, decrease in respiratory distress syndrome 3% vs 7%, neonatal morbidity and mortality 7% vs 13%.

Conclusion: Administration of vaginal progesterone insert to patients with short cervix in mid trimester resulted in 40% reduction in rate of preterm birth.

Session 6: 15.00-16.00 hrs
Chairpersons
Dr B Majhi, Dr Leena Wadhwa
Dr Neha Gupta

Serum Lactic Acid in PAS for Maternal Outcome

P Goyal, R Agarwal, H Srivastava
R Kar, M Mohta, M Sikka
University College of Medical Sciences and Guru Teg Bahadur Hospital, Delhi

Objective: To correlate serial monitoring of lactic acid in PAS subjects with maternal prognosis.

Methods: All pregnant, post abortal (2 weeks) and postpartum women with suspected sepsis fulfilling any 2 of the quick SOFA criteria were considered as cases. Lactic acid was measured

at 0, 24 and 48 hrs of admission and lactate clearance was calculated.

Results: The mean value of lactic acid was significantly higher in the ICU group than Non ICU group at 0,24, and 48 hours with values being (6.00±2.46 mmol/l vs 3.25±1.92 mmol/l), (4.44±2.24 mmol vs 2.91±1.77 mmol/l) and (5.65±2.91 mmol/l vs 2.99±1.93 mmol/l.) respectively. Lactic acid in survivor group was significantly lower as compared to mortality group (3.79±0.32mmol/l vs 7.3±0.56 mmol/l). A cut off of 3.8 mmol/l with AUC of 0.814 has a sensitivity of 84% and specificity of 68% for predicting ICU admission. The mean lactate clearance was 46% in cases who survived and 22.5% in cases who had mortality. When lactate clearance was 60 % no mortality was seen whereas when there was 100% rise in lactic acid, they all had mortality.

Conclusion: The mean lactic acid at 0, 24 and 48 hr was significantly higher in ICU group as compared to Non ICU group Serum lactic acid at zero hours of the presentation was significantly higher in ICU cases. Lactate clearance (fall) helps to prognosticate as fall of ≥60% lactic acid level is associated with 100% survival, whereas rise of 100% in serum lactic acid is associated with 100% mortality.

Clinical Profile and Maternal Outcome of Postpartum Patients Requiring Critical Care

Monali Khergade, Jyotsna Suri
Pratima Mittal, Rekha Bharti
Vardhman Mahavir Medical College
and Safdarjung Hospital, New Delhi

Objective: To study clinical profile, need of interventions and maternal outcome of postpartum patients requiring critical care.

Methods: In a prospective cohort study conducted in Department of Obstetrics & Gynecology at Vardhman Mahavir Medical College & Safdarjung Hospital, New Delhi from Nov 2017 to 31 March 2019, 250 Obstetric patients (Pregnant and postpartum women within 42 days of delivery) admitted in the dedicated Obstetric Critical Care Unit (CCU) were recruited after an Informed consent. Out of which 122 (48%) were postpartum patients. SOFA score was calculated within 24 hours of admission and maternal outcomes studied.

Results: Most common indication in postpartum patients for admission to Obstetric CCU was puerperal sepsis (30%) followed by Acute Kidney Injury (19.6%). Out of 122 patients, 114 got transferred to ward, mortality occurred in 28 patients. Most common etiologies contributing for Maternal Mortality were Puerperal sepsis

(39.2 %), AKI (25%) followed by Postpartum haemorrhage (14.2%).Area Under Receiver Operating Characteristic Curve of SOFA score with cut off >5 for prediction of Maternal Mortality in those patients was 0.94. (P value <0.0001).

Conclusion: Postpartum period is a critical period. Puerperal sepsis is mostly responsible for admission to Obstetric CCU and a major etiology contributing to Maternal Mortality.

Study of Modified Myocardial Performance Index in Intrauterine Growth Restricted Foetuses at 28-37 Weeks

Kaarthiga R G, Devender Kumar Sumodh Kurien, Anjali Tempe
Maulana Azad Medical College
& Lok Nayak Jai Prakash Hospital, Delhi

Objective: To assess the modified myocardial performance index in intrauterine growth restricted foetuses between 28-37 weeks and to associate the observed values of modified myocardial performance index with perinatal outcome.

Methods: Total of 30 singleton pregnancies between 28 and 37 weeks of gestation diagnosed as IUGR (expected foetal weight or Abdomen circumference less than 10th percentile for that gestation age) with sure of dates were included in this study and prospective observational study was designed. Routine foetal surveillance, antenatal care and modified MPI were recorded. Unpaired't' test and one-way ANOVA test was used for analysis.

Result: The primary outcome was to assess the modified myocardial performance index which was observed high in all the IUGR cases but it was raised less than 2SD in all the cases. The secondary outcomes were gestational age at delivery, onset of labour, the mode of delivery, birth weight and the need of NICU admission. NICU admission was statistically significant (P value is 0.015) in high median value of modified MPI (0.66). Oligohydramnios, the Doppler studies of umbilical artery, gestational age at delivery, onset of labour, the mode of delivery, birth weight had no statistically significant relation with modified MPI.

Conclusion: The modified MPI was observed high in all the IUGR foetuses. So MPI can be used as a potential tool in the evaluation of foetuses with suspected IUGR. As MPI can also significantly predict the rate of NICU admission, its combination with doppler studies may help better in the prediction of pregnancy outcome and NICU admission.

KAP about Contraception in Medical and Paramedical Staff of Hospitals

Anubha Varshney, Anupam Nidhi
Guru Gobind Singh Hospital, New Delhi

Introduction: health workers including the doctors, medical and paramedical staff members are the important bridge between general population to impart knowledge and practice of contraception and removing the myths from couple mind. However their own knowledge, attitude and practice for contraception are lacking.

Objective: this study was conducted to assess the knowledge, attitude and practice among the health workers towards contraception.

Material and Methods: A prospective study was conducted from March 2019 to May 2019 in Guru Gobind Singh Hospital among 92 health workers. Pretested questionnaire were read out among the participants which contain question based on socio demographic information and question on knowledge, attitude and practice were asked.

Results: Almost all staff were aware about the family planning methods but most of them did not know about failure rate of different methods. Contraceptive usage among the health workers were 45.65%. 52.8% uses barrier method followed by CuT. 54.35% are not using any contraception. Almost all have positive attitude for use. 21% not using due to desire for fertility and rest have no concrete reason for use. The main reason for acceptance was family planning and self-health.

Conclusion: Health professional have awareness regarding contraception but yet fail to use it regularly. Therefore efforts are needed through regular onside training and motivation to bring the change in practice in order to change their attitude and that will enhance counselling skills regarding contraception.

Thyroid Disorders in Pregnancy: Prevalence and fetomaternal outcome in a tertiary hospital of delhi

Neha Bansal, Divya
Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi

Background: This study was conducted to determine the feto maternal outcome in pregnant women with thyroid disorders. The prevalence of thyroid disorders in present study was 15.75%.

Methods: This was a prospective observational study carried out in all pregnant women irrespective of their parity, who attended ANC clinic in department of Obstetrics and Gynaecology in a tertiary care hospital over a period of 2 years. After registering, the patients were followed up with routine antenatal visits up to delivery and records were reviewed for development of abortion, PIH, preterm delivery, GDM, anemia, placental abruption, still birth, anomalies, fetal distress, meconium stained liquor, low birth weight and neonatal outcome by neonate APGAR score and TSH value.

Results: Mean age group in our study was 27.61±3.14. Family history was present in 8% of study group versus 0% in control group which was statistically significant (p= 0.028). Eighteen percent of preeclampsia was diagnosed in study group as compared to 4% in control group which was statistically significant (p value = 0.005). Fourteen percent patients had preterm labour in study group as compared to 6.7% in control group which was statistically significant (p value = 0.047). Increased neonatal TSH was found in study group (61.3%) as compared to control group (32%), this difference was statistically significant. Conclusion: All pregnant women should be screened for hypothyroidism as early as possible or before conception to prevent any fetomaternal complications.

Poster Presentation

Day 2: November 24th, 2019

Session 1: 09.00-10.00 hrs

Chairpersons

Dr Bindiya Gupta, Dr Yukti Wadawan

Dr Karishma Thariani

A Rare Case Presentation of Pseudo-meig Syndrome

Komal Jadon, Namita Chopra, Pushpa Singh Kamna Datta, Sushma

Ram Manohar Lohia Hospital, New Delhi

Introduction: Pseudo meigs syndrome is a rare syndrome with pelvic tumors with ascites and hydrothorax which can mimic malignancy.

Case Report: Mrs. X, 40 yrs, P3L3A1 presented to gynae-opd with complaints of pain abdomen, shortness of breath and abdominal distention since 6 months. Patient was thin built with gross ascites and decreased air entry in both lungs. Serum proteins were decreased and CA-125 was 2416iu/ml. Rest of the investigations were

normal. Ultrasound abdomen revealed gross ascites, normal uterus and well defined complex left adenexal mass measuring 5.7×6.5×7 cm and normal right adenexa. CT-PET demonstrated metabolically active solid cystic left ovarian mass with left sided moderate pleural effusion chest x-ray suggestive of bilateral pleural effusion. Pleural and ascitic fluid cytology showed no malignant cells. Patient underwent staging laparotomy with total abdominal hysterectomy, bilateral salpingooopherectomy with infracolic omentectomy. Gross appearance of the tumor revealed grey coloured mass with areas containing mucinous yellow green jelly like substance. Histopathological examination of the mass was suggestive of struma ovarii. Post op period was uneventful and she was followed till six months post surgery.

Discussion: Struma ovarii is a very rare cause of pseudo-meigs with only 10-11 cases reported so far. Association with raised CA-125 is even rarer. Around 8% cases manifest features of hyperthyroidism and around 0.3% cases are found to be malignant. Diagnosis is primarily on HPE with IHC (thyroglobulin and TTF positive).

Conclusion: The aggressive clinical course and radiological indicators pointing towards malignancy eventually surfaced as pseudo meig syndrome, a benign condition. It should be considered a differential while evaluating adenexal mass with third space fluid collection.

Mullerian Duct Cyst: A rare differential of ovarian Cyst

Surbhi, Abha Kiran, Veena Ganju
ABVIMS, Dr Ram Manohar Lohia Hospital, New Delhi

The müllerian duct cyst is a remnant of the caudal ends of the fused embryologic paramesonephric ducts (or müllerian ducts). Preoperative distinction of ovarian cyst from a müllerian duct cyst is important and is based on visualization of the ipsilateral ovary separate from the mass. Müllerian duct cysts may also be mistaken as paratubal, paraovarian or peritoneal inclusion cysts and hydrosalpinx. Thus, preoperative diagnosis of müllerian cyst of the uterus can be very challenging. However, with increased awareness, preoperative diagnosis of this condition should be possible by sonography. Laparoscopy is useful as a minimally invasive treatment to diagnose as well as resect the cyst at the same time. 38 years P3L3 post hysterectomy patient presented to GOPD with complains of pain abdomen for past 1 year. On examination and investigation a left ovarian anechoic lesion with multiple septation of size approx. 10*13 was found. Staging laparotomy with left sided salpingoophrectomy was done and sample sent for histopathology which revealed mullerian cyst. Patient is under follow up in GOPD.

OHVIRA Syndrome (Herlyn Werner Wunderlich Syndrome): A rare entity

Paridhi Gupta
ABVIMS, Dr Ram Manohar Lohia Hospital, New Delhi

Introduction: OHVIRA syndrome is a rare congenital anomaly consisting 5% of total mullerian dysgenesis. It consists of a triad of uterine didelphys, obstructed hemivagina and ipsilateral renal agenesis. It usually presents soon after menarche but may have delayed presentation depending upon type. It usually presents with pelvic pain and dysmenorrhea may be associated with urinary complaints.

Case Reports: Mrs x, 31 yr female, P2L2 with previous 2 caesarean deliveries reported in GOPD, Dr RML hospital with complaints of pelvic pain, urinary retention and hematuria since 2 months and with ultrasound report suggestive of bicornuate uterus with large hematocolpos /hematometra. Patient was catheterized to relieve urinary complaints. Examination under anesthesia was done –a huge cystic bulge on anterior vaginal wall seen. On aspiration, 100cc of blood mixed organized collection was obtained. Cystoscopy showed normal bladder wall. Cervical os was seen posterior to bulge which couldn't be negotiated. On MRI, bicornuate bicollis uterine anatomy was seen with right hematotrachelos. IVP was suggestive of absent right kidney. Laparotomy with right hemihysterectomy along with drainage of hematocolpos was done.

Discussion: A didelphys uterus is characterized by complete failure of the mullerian ducts to fuse leading to separate uterine cavities and two cervices. Because the mullerian ducts develop often in association with wolffian ducts, abnormalities of the kidneys may be found in conjunction with uterine abnormalities.

Conclusion: This is rare case of a women with didelphys uterus who conceived and delivered successfully by caesarean section. Usually such cases present soon after menarche but rare one presented late. The principle management in such cases is drainage of collection obstructing the outflow and channelization of passage.

An Atypical Presentation of Leiomyoma

Aayushi Pal, Sushma Rani, Pushpa Singh, Bani Sarkar, Kamna Datta
ABVIMS, Dr Ram Manohar Lohia Hospital, New Delhi

Introduction: Uterine leiomyomas are most common benign Gynaecological tumors. While on histology, most leiomyomas are usual

myomas, sometimes rare variants of uterine smooth muscles tumors may be encountered. These tumors pose difficulty in diagnosis, management and prognostication.

Case Report: Mrs. X, 24 yrs. old female, nulligravida presented with complains of menorrhagia since 2 yrs. USG suggestive of fibroid. Patient was prescribed medical management for 6 months to which she did not respond. She was planned for myomectomy. Post myomectomy after 3 months she again presented with menorrhagia. On USG, fibroid measuring 3cm×3cm was found. Patient started on medical management but did not improve. On further evaluation, size was found to be progressively increased measuring 8×8cm. In view of suspicion of atypical variant of leiomyoma, her previous myomectomy HPE slides reviewed, which was suggestive of cellular leiomyoma..Patient was planned for total abdominal hysterectomy. Post op period was uneventful. Patient improved symptomatically and no recurrence was reported in subsequent 6 months.

Discussion: Cellular leiomyoma is rare variant and do not account for >5% of leiomyomas. The recurrence and re-operation rates after myomectomy (28.6 and 14.3%) respectively in cellular leiomyomas. Diagnosis is primarily on HPE with IHC (SMA, Vimentin and Desmin positive and CD-10 negative).

Conclusion: High index of suspicion should always be raised in cases of fibroid with atypical presentation.

Extraintestinal Gastrointestinal Stromal Tumor as Uterine Leiomyoma

Inlo Miuli, Achla Batra
Vardhman Mahavir Medical College
and Safdarjung Hospital, New Delhi

Introduction: Gastrointestinal stromal tumors (GISTs) account for 0.1% to 1% of all gastrointestinal malignancies. Extraintestinal GISTs are extremely rare. Most GISTs present after the age of 50 years. In younger patient it is uncommon.

Case Presentation: A 34 years old P4L4 presented with pain abdomen for 4 months. Pain was aggravated during walking and heavy work and relived with analgesics. Patient did not have associated bowel and bladder complaints or any change in menstrual cycles. There was no significant past or family history. On per abdomen examination a mass corresponding to 16 week size uterus was felt. It was soft, freely mobile and non-tender. On per vaginum mobile, non-tender, mass of around 20 weeks was felt in the left side of bulky uterus. On USG, a large

multicyctic mass of 10 X 8 X 7 cm was seen on the left side of the uterus. Left ovary was not visualised. Right ovary was normal, uterus size normal with ET trilaminar. On CECT, 10.6 X 17.8 X 12.6 cm solid cystic mass of left adnexa was found, likely of ovarian origin with internal projections and irregular septaes. Findings were s/o mucinous adenocarcinoma or endometriod variety of epithelial ovarian neoplasm. B/L hydronephrosis was present, rest were normal findings.

Gross Finding: left broad ligament mass of 22 X 11 X 3.5 cm. External surface smooth and capsule intact. On cut section multiple cysts of 0.5 to 2.5 cm with mucin.

Microscopic Finding: Cells are arranged in pappilaroid and clusters, sheets and microfollicular pattern, lying singly. The cells have round to oval nuclei, scant cytoplasm, vesicular chromatin and conspicuous nucleoli.

HPE: GIST i.e. gastrointestinal tumor.

Discussion: The rarity and unspecific symptoms can lead to delay in diagnosis. Multimodality approach with ultrasound and CECT with an early approach is useful.

Conclusion: Though rare, in young woman during the evaluation of the adnexal masses a possibility of GISTs should be incorporated. This can affect the operative plan and further adjuvant therapy giving better survival.

A Rare Case Report of Sertoli Cell Tumour of Ovary

Rasika Agarwal, Indu Chawla
ABVIMS, Dr Ram Manohar Lohia Hospital, New Delhi

Introduction: Sex cord stromal tumors account for about 5% of all ovarian neoplasms. Sertoli cell tumours are rare, unilateral, sex cord stromal tumors of ovary, which constitute less than 1% of all ovarian neoplasms. These occur most often in 3rd and 4th decades of life.

Case Report: A 30 year old married woman (married for 4 years), nulliparous presented to the gynaecologic OPD with the complaints of inability to conceive since 4 years and excessive hair growth on her face for 3 years She was having regular menstrual cycles with an average flow. General physical and clinical examination revealed an average built female with hirsutism and clitoromegaly. USG revealed left ovarian solid mass. On laparotomy, left ovarian solid mass was found. Histopathological examination revealed Sertoli cell tumour.

Discussion: Sertoli cell tumors of the ovary account for 1% of sex cord stromal tumors of ovary. The most useful IHC findings are the negative staining for EMA, positive for Inhibin and Calretinin. Microscopically there are tubular

pattern of Sertoli cells in mature fibrous or hyalinised stroma.

Conclusion: Sertoli cell tumor should be kept in mind in a young female with complaints of hirsutism, Clitoromegaly and pelvic lump.

Atypical Leiomyoma of Uterus: A case report

Kriti Bhakuni, Abha Kiran, Veena Ganju
ABVIMS, Dr Ram Manohar Lohia Hospital, New Delhi

Introduction: Atypical leiomyoma or leiomyoma with bizzare nucleus is diagnosed on histopathological examination characterized by severe cytological atypia in the form of nuclear enlargement, multi nucleation, hyperchromasia, coarse chromatin and prominent nuclei. These tumors do not have typical features of necrosis or mitotic figures to characterize them as leiomyosarcoma. There are 2 % risk of these tumors to convert to leiomyosarcoma.

Case Report: 50 year P3L3A1 postmenopausal for past 6 years presented to GOPD with complains of pain in lower abdomen for past 1 year. Patient was examined and investigated .On clinical examination there was no apparent finding. On radiological examination a well defined hypoechoic lesion of 6.4X5.7 cm was found arising from uterus. CECT abdomen showed heterogenous mass involving endometrium and myometrium likely neoplastic. Total abdominal hysterectomy with bilateral salpingoophrectomy was done. HPE report revealed features of atypical leiomyoma. Patient is under follow up in GOPD.

Atypical Presentation of Mullerian Agenesis

Chandrakanta Prasad, Indu Chawla Kanika Kumara, Anjum Ara
ABVIMS, Dr Ram Manohar Lohia Hospital, New Delhi

Introduction: Mullerian agenesis is a malformation complex characterised by congenital absence of the upper two-thirds of the vagina and an absent or rudimentary uterus in women who have normal development of secondary sexual characteristics and a 46,XX karyotype.

Case Report: An 18year old Unmarried girl, presented in gynaeOPD with the complaints of pain radiating to both thighs and back mainly after 3-4 days of menses Since 2 -3 months. Her menstrual cycle was regular with average blood flow. On examination: BMI =21.1.Tanner stage 4. On P/A no lump or swelling detected.

P/R- A bulge of 3*3cm felt to left side. Blood investigation- Mild anaemia. On USG pelvis: Uterus Bicornuate with right horn measures 5*3.2 cm With ET -5.4MM.Left horn measures 6.2*3.8cm with ET 8.3mm. A 4.5 *3.2 cm sized well defined hypoechoic lesion is seen in cervix. MRI whole abdomen- Bicornuate uterus with collection of approx. 36*28*38mm in left cervical canal. Provisinal Diagnosis-18 yr, unmarried with didelphys uterus type 3 AFS classification with left hematocolpos. Pt was planned for EUA f/b diagnostic Vaginoscopy laproscopy. Per op findings: Vaginoscopy done small bulge visualised 3*3 cm on left anterio lateral wall of vagina. Decision for laparotomy taken and 30cc of blood stained pus was aspirated. Bicornuate uterus was present. Right sided horn communicating with cervix and vagina. Right sided fallopian tube and ovary was normal. Left horn was non communicating with vagina and septum was covering the cervix therefore, septual resection done and communication with Cervix and vagina created. Intrauterine foley inflated with 40 cc and kept to maintain the patency of tract. Left side tubo -ovarian mass of 2*2cm constituting hydrosalpinx and dermoid present. Therefore, left salpingectomy with cystectomy f/b reconstruction of ovarian tissue was done.Left kidney was absent on palpation. Final procedure- EUA f/b Vaginoscopy laproscopy f/b laparotomy with septal resection of vagina and cervix with dermoid cystectomy with left salpingectomy.

Conclusion: The principal management includes psychological support and the creation of a neovagina for sexual function.

Diagnostic Performance of Saline Infusion Sonography and Hysteroscopy for Evaluation of Endometrial Lesions in Postmenopausal Bleeding

Shikha Bharti
Vardhman Mahavir Medical College
and Safdarjung Hospital, New Delhi

Objective: To determine diagnostic performance of saline infusion sonography and hysteroscopy for evaluation of endometrial lesions in postmenopausal bleeding.

Methods: Being a prospective cross-sectional study, the present study was conducted on 46 postmenopausal women with bleeding, admitted to department of obstetrics and gynaecology VMMC & Safdarjung hospital. After TVS, all patients with ET > 4 mm underwent SIS and then scheduled for hysteroscopy when there was no active bleeding. Sensitivity, specificity, positive predictive value and negative predictive

value were calculated to compare the diagnostic accuracy of SIS and Hysteroscopy.

Results: Most commonly found endometrial lesions were polyp (39.13%) and endometrial hyperplasia (28.26%) among our study population consisting of 46 postmenopausal women (mean age 56.72± 6.6 years). Overall sensitivity rates were 86.84% for SIS and 97.37% for hysteroscopy, while the overall specificity rates were 50% for both SIS and Hysteroscopy. Hysteroscopy had PPV and NPV of 90.24% and 80% respectively whereas PPV and NPV were 89.19% and 44.44% for SIS.

Conclusions: As an easy to perform, safe and well tolerated procedure yielding high diagnostic accuracy, SIS seems to be comparable to Hysteroscopy for endometrial evaluation.

Unusual Case of Episiotomy Myiasis - A rare case scenario

Huma Ali, Anupam Nidhi
Guru Gobind Singh Government Hospital, New Delhi

Introduction: Myiasis refers to infestation of dipterous larvae in various body tissues and orifices. Predisposing factors includes open wound, presence of bleeding, poor hygiene, open air defecation, chronic illness and immunocompromised state. However myiasis in episiotomy is extremely rare and only few cases have been reported in literature.

Case Report: A 21year old P1L1 lady on postnatal day12 of full term vaginal delivery with right medio-lateral episiotomy, presented with complaints of pain in episiotomy site since 7 days and she noticed worms coming out of the wound since morning and visited the hospital casualty. Her pain was gradually progressive and was intense since 1-2days, she also complaints of gaping of episiotomy wound 7days back and itching in the perineal region. On examination uterus was involuting well, right labia was found swollen and indurated, skin and muscular layers of episiotomy was gaping with intact mucosa, maggots of 1-1.5 cm size were seen coming out of the wound along with purulent discharge. Maggots were deeply buried in the muscular layer and burrows were extending into the right labia. Also 2 maggots were found in the vaginal wall. Total 19 maggots were removed, she was given injectable antibiotics and twice daily dressing of the episiotomy wound. **Discussion:** Episiotomy is not a common site of myiasis but in poor hygiene status infestation can occur. Hence conduction of delivery should be done in sterile condition and taking all aseptic precautions and care of episiotomy and proper sanitation practices must be explained to all.

Session 2: 10.00-11.00 hrs
Chairpersons
Anshuja Singla, Dr Chintan Chaudhry
Dr Rajesh Ahlawat

Study of Serial Change in Placental Profile During Pregnancy and its Role in Predicting Hypertension in Pregnancy

Kirti Balyan, Manisha Kumar
Ekta Debnath, Abha Singh
Lady Hardinge Medical College
& Smt. Sucheta Kriplani Hospital, New Delhi

Objective: Study of maternal factors, placental biomarkers, placental biometry and uterine artery Doppler in each trimester of pregnancy and their role in prediction of hypertensive disorders of pregnancy.

Methods: Women with period of gestation 11 wks to 14 weeks were enrolled and placental profile (placental biomarkers, uterine artery Doppler, placental size and volume) in the 1st (11- 14 weeks), 2nd (20- 24 weeks) & 3rd (28-32 weeks) trimester are measured and followed till delivery.

Results: Total of 100 patients were recruited and followed till delivery out of which, 27 had adverse outcome, among them 11 had hypertension in pregnancy, 12 were small for gestation. The biomarker PAPP- A levels increased as pregnancy advanced; similarly the mean value of PlGF also increased as pregnancy advanced, whereas the sFLT – 1 showed a trough in second trimester and rose again in third trimester. The Mean Uterine PI, RI and S/D ratio showed decreasing trend as pregnancy advanced. The Placental length, width and thickness increased with advancing pregnancy. The biomarkers did not show any significant difference between the cases and controls in the first trimester , in the second and third trimester the PAPP-A, and PlGF levels were significantly lower in cases compared to controls (p= 0.05), whereas the sFLT -1 levels and the ratio of sFLT / PlGF was significantly higher. All placental biometric values were lesser in cases compared to controls (p= 0.03) in all three trimesters which is suggestive of placental dysfunction in patients with adverse outcomes.

Conclusion: Significant difference of placental biometric values and placental biomarkers in between cases and healthy controls depicts the role of studying placental profile for early prediction of hypertension during pregnancy.

Anhydramnios - Knocking the wrong door

Anu Handa, Meenakshi Singh
Ratna Biswas, Abha Singh
Lady Hardinge Medical College
& Smt. Sucheta Kriplani Hospital, New Delhi

Background: Patients frequently present with early onset anhydramnios, 4 % of which remain unexplained. There remains a management dilemma regarding such patients in view of peri- viability. We present a case of early onset anhydramnios which turned out to be an intraligamentary pregnancy.

Case Report: A 30 yr old G2P1L1 with 24 weeks gestation was referred to a tertiary care centre in view of anhydramnios with low lying placenta. She did not have any complaints of leaking, pain in abdomen or fever. Her vitals and general examination were stable on admission. On abdominal examination, fundal height was 24 weeks, uterus relaxed with grossly reduced liquor, FHS present and regular. Her routine investigations were normal. USG Obs revealed an intrauterine fetus of 23 weeks, with nil liquor, no anomalies, placenta praevia 3. Conservatively managed for 4 weeks, after which at 28 weeks gestation she developed fever and pain in abdomen. She had tachycardia of 120/min, per abdomen uterus 26-28 weeks size, tenderness was elicited and FHS 180/min. CRP was positive and TLC count 21,500/mm3. She was taken for caesarean in view of possible chorioamnionitis with placenta previa type III. Intra-op she was diagnosed as an Intra- ligamentary pregnancy in the Right broad ligament. Uterus was bulky and pushed postero- laterally towards the left side. A live female baby of 760 gm was delivered. Placenta was removed in bits and pieces. The sac was then sequentially clamped and excised. Right sided ovary which was adherent to the sac was salvaged. Post-op period was uneventful.

Conclusion: A TVS scan is important for diagnosis. A high index of suspicion should be maintained for patients who have a displaced cervix, early onset anhydramnios and failed induction of labour.

A Rare Case Report of Placenta Accreta without Previa (Clinical Grade 3) in Unscarred Uterus

Swati Singh Renuka Malik
ABVIMS, Dr Ram Manohar Lohia Hospital,
New Delhi

Introduction: PAS disorders are usually associated with direct surgical scar such as caesarean delivery, Surgical termination of pregnancy, Dilatation and curettage,

Myomectomy, Endometrial resection and Asherman's syndrome. It can also be associated with Non surgical scar and uterine anomalies .Rarely it can be encountered in unscarred uterus.

Case Report: Mrs X, 35 year female, unbooked patient, G7P2L2A4 with nine months of amenorrhoea reported in emergency of RML Hospital on 30/07/2019 with history of labour pains since 2 days. Patient gave history of four Dilatation &Curettage for incomplete abortion. On examination patient was found to be severely anaemic (Hb -6 gm). 2 Packed RBC were transfused preoperatively. There was no progress in labour beyond 6 cm for 4 hours. Patient was thus taken for LSCS for NPOL, with blood on flow. Intraoperatively, after delivery of the baby placenta which was fundo – posterior did not separate. In view of parity and morbidly adherent placenta (Clinical grade III), subtotal hysterectomy was done. Patient was transfused 4 PRBC, 4 FFP and 2 platelets. Uterus with placenta in situ was sent for Histopathology. Patient was in ICU for 2 days and recovered well. Post operative period was uneventful. Histopathology report came as Placenta accreta.

Discussion: Placenta accreta is defined as abnormal trophoblast invasion of whole or a part of placenta into myometrium of uterine wall. Caesarean delivery is associated with increased risk of placenta accrete and the risk increases with each caesarean section, from 0.3% in woman with one previous caesarean delivery to 6.47% for woman with five or more caesarean deliveries. Placenta accreata spectrum disorders occur in 3% of woman diagnosed with placenta previa and no prior caesarean.

Conclusion: Placenta accreta spectrum disorders are not exclusively consequence of caesarean delivery. Sometimes they can occur with defective myometrium due to multiple MTPs and D&C.

A Comparative Study of Dinoprostone Vaginal Pessary and Dinoprostone Intracervical Gel for Pre-induction Cervical Ripening

Saima, Achla Batra
Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi

Objective: 1. To find efficacy of dinoprostone intracervical gel and vaginal pessary as pre-induction cervical ripening agents. 2. To study the safety of these two preparations.

Methods: It is a prospective randomized study and was carried out in the department of OBGY in VMMC & SJH. The duration of study was 18

months. A total of 140 women, 70 in each group were randomly recruited. The data were entered in MS EXCEL spreadsheet and analysis was done using SSPSS version 21.0.

Results: There was no significant difference in various outcomes observed within 24 hours of insertion of dinoprostone intra-cervical gel and pessary (p value 0.473). The most common observed outcome was spontaneous onset of labour. There was no significant difference in mean bishop score at 24 hours between the groups (p value 0.779) as well as no significant difference in mean change of bishop score from initial to final in both the study group (p value 0.929). The mean duration of oxytocin use in gel group was higher (p value 0.005). The caesarean section rate and side effects were significantly lower in pessary group compared to gel group.

Conclusion: Dinoprostone gel and pessary both are equally effective as cervical ripening agents but vaginal delivery rate and duration of oxytocin requirement is low in pessary group. Both gel and pessary are safe but pessary has lower complications.

A Rare Case of Twin Pregnancy in the Noncommunicating Rudimentary Horn of Unicorn ate Uterus: A case report

Apurva Nain, Nupur Gupta, Taru Gupta

PGIMSR and ESI Hospital, Basai Dara Pur, New Delhi

Case Reopt: We report a case of twin pregnancy in a noncommunicating rudimentary uterine horn. The patient presented at 9 weeks' gestation with acute abdominal distress and was antenatally diagnosed as a case of twin tubal ectopic pregnancy. On laparotomy, it was detected to have a noncommunicating thinned out left rudimentary horn with twin pregnancy. On laparotomy, instead of finding twin sacs in fallopian tube, rudimentary horn with unicornuate uterus was discovered with both gestational sacs in left horn and a nonpregnant right horn. Serosa of left horn was much thinned out and about to rupture. To check the communication from vagina, patient was put in lithotomy position and dilatation of cervix was done. Vagina had communication with only right horn of uterus and left horn with twin sacs was noncommunicating. Patient was again laid straight and decision of left horn excision was taken after taking consent from the husband.

Conclusions: Twin pregnancy in a noncommunicating rudimentary uterine horn is rare and is difficult to diagnose antenatally. Pregnancies in a rudimentary uterine horn

rarely reach viability and often result in rupture of the horn, causing significant foetal and maternal mortality and morbidity. In 83% of the cases, the rudimentary horn has been found to be noncommunicating. Pregnancy in a noncommunicating rudimentary horn occurs through the transperitoneal migration of the sperm or the fertilized ovum. The incidence, diagnosis and management of such cases are discussed.

Self Limiting Fetal Bradycardia Associated with Maternal Evidence of Dengue and Chikungunya Virus Coinfection: A Case Report

Anupriya Narain, Alka Goel
ABVIMS, Dr Ram Manohar Lohia Hospital, New Delhi

Introduction: Dengue and chikungunya infections are commonly encountered by the clinicians in a tropical country like India. We report this case to emphasize the rare manifestation of self limiting intrapartum bradycardia in a fetus of chikungunya and dengue infected mother.

Case Report: A primigravida at 32 weeks of gestation presented with history of fever for one day. The blood investigations were positive for both dengue and chikungunya virus infection. On the third day of fever, NST showed a baseline heart rate of 95-100 beats per minute but good beat to beat variability and three accelerations in ten minutes. This pattern persisted for 48 hours and she was kept under strict fetomaternal surveillance. Although, the finding initially appeared alarming, the change in baseline heart rate of fetus was transient and self limiting and recovered completely. Hence, a judicious approach and close fetal surveillance can avoid hasty decisions regarding an early termination of pregnancy. However, further research is warranted to strengthen or refute this association for optimum fetal outcome in such cases.

Takayasu Arteritis in Pregnancy: An unusual case report

Ankita Kumari, Zeba Khanam, Divya Pandey Rekha Bharti, Jyotsna Suri
Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi

Introduction: Takayasu arteritis, a large vessel chronic granulomatous vasculitis with worldwide prevalence of 2.6-6.4 persons per

million population [1]. It most commonly affects young Asian females between 15-30 years of age. It can complicate pregnancy with severe hypertension, fetal growth restriction and/or cardiovascular complications. We hereby present case of a gravid female with Takayasu arthritis and intricacies associated with her diagnosis and management.

Case Report: A twenty-seven years old primigravida at third month of gestation was referred to the outpatient department of our hospital in view of Takayasu arteritis. She was asymptomatic at presentation but on examination, her bilateral radial and brachial arterial pulses were absent. Lower limb distal arterial pulse was well palpable. Additionally, her right carotid pulse was low in volume. Upper limb blood pressure was within normal limits. Bilateral lower limb blood pressure was markedly high. Rest of the general examination was unremarkable. On per abdomen examination, fundal height corresponded to period of gestation. Bilateral subclavian artery doppler revealed thickening of arch of aorta and wall thickening of brachiocephalic and right subclavian artery (Type I disease). Bilateral Renal artery doppler was grossly normal. Patient was started on aspirin. She was regularly followed till term. Labour was induced at term due to superimposed preeclampsia over chronic hypertension and she delivered vaginally. She had uneventful intrapartum and postpartum period.

Conclusion: A multidisciplinary tertiary care approach involving senior obstetrician, cardiologist, interventional radiologist and anesthesiologist is warranted to optimize care to pregnant women with Takayasu arteritis for favourable maternal and fetal outcomes.

Feasibility of Salpingectomy at the Time of Vaginal Hysterectomy

Ritu Singh
PGIMSR and ESI Hospital, Basai Dara Pur, New Delhi

Objective: Primary objective of this study was to determine the feasibility of bilateral salpingectomy at the time of vaginal hysterectomy. Secondary objective was to determine the factors associated with unsuccessful salpingectomy, and also to assess the additional length of time and estimated blood loss associated with bilateral salpingectomy.

Methods: Study was conducted at ESI PGIMSAR Basai Darapur hospital for duration of 1 year i.e. from December 2018 to November 2019. Patients which were presented to Obstetric OPD and emergency (fulfilling the inclusion criteria), gave full consent to be the part of study. A total pool of 35 patients were included under

this study which had helped in meeting both objective of the case study. Observational study was conducted to determine the feasibility of bilateral Salpingectomy at the time of vaginal hysterectomy. Descriptive analysis had been performed to characterize the sample and determine the proportion of planned Salpingectomies, which was successfully completed and additional length of time and estimated blood loss associated with salpingectomy were noted.

Results: Mean age of study participants was 56.95±5.62 years. Among study participants, 86.3% of the patients were currently married while 13.7% of them were widow. Hypertension and diabetes (68.8% and 40.6% respectively) were found to be most common medical conditions associated among all patients. Thirty-one (88.5%) patients underwent successful salpingectomy with operative time from 10 to 20 minutes with mean duration of 14.05±2.75 minutes. Equal proportion of patients had bradycardia and hematoma (5.7%) intraoperatively, one patient (2.8%) had bleeding while 86.4% of them had no complication intraoperatively. At immediate post-procedure assessment, maximum number of patient (04, 11.4%) had postoperative uterine tract infection and 02(5.7%) patients had blood transfusion reaction post-operatively. Rest 29 (~83%) of them had no postoperative complication. When assessed at 6 weeks after the procedure, four (11.4%) of the patients had vaginal infection while 31(88.6%) patients had no complication. Among all patients undergoing the procedure, four patients had need for readmission following discharge. Bleeding per vaginum and infection were identified causes among these patients for readmission.

Silent rupture of Unscarred Uterus at 32 Weeks: Case reports

Divya, Sarita Singh, Achla Batra
Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi

Introduction: Rupture in an unscarred uterus prior to onset of labor in third trimester is a rare event and very few cases have been reported in literature so far.

Case Report 1: We describe a case of a primigravida who presented in emergency with pain abdomen with placenta praevia and severe oligominos. An ultrasound was conducted which reported bicornuateunicollis uterus with single live foetus 33+4 weeks having severe oligohydromnios (AFI=2) with placenta anterior and reaching upto internal os in one cornua, the other cornua was empty. A MRI was conducted, which was also inconclusive. She was taken up for laprotomy, peroperatively pregnancy was present in left horn of uterus which had ruptured

with intact amniotic sac and was covered with omentum, the placenta was covering the lower half of the left horn and the right horn looked like normal uterus and was empty. The omentum was carefully separated and baby that was delivered weighed 700gms. The left horn was excised and then uterus was closed in layers. Patient was followed up for 6 months, mother was doing well, though baby was 5 kg which was less than the weight for that age and had slow developmental milestones.

Case Report 2: Our second case was a 30 years old gravida 5, para 2, abortion 2 woman with 8 months amenorrhea. She was referred with chief complaint of pain abdomen. On examination, she looked almost stable. Even though she was pale; vital signs were within normal parameters. An ultrasound was conducted which showed single live intrauterine foetus 29+2 weeks with absent liquor with placenta praevia with placenta acreta. Emergency laprotomy was decided in view of placenta acreta. It was found to be an abdominal pregnancy. Amnion along with omentum and blood clot matting sac like structure sitting over the fundus with placenta perforating the fundus small incision was given at the fundus and baby weighing 1.15 kg delivered through it. Placenta did not separate and so decision of hysterectomy taken.

Conclusion: Rupture in a non laboring unscarred uterus is a very rare condition and needs high index of suspicion for diagnosis it should be kept in differential diagnosis of pregnancy with abdominal pain of any degree.

Hook Effect in a Case of Gestational Trophoblastic Neoplasia

Neha Malik, Aakriti Batra
Vardhman Mahavir Medical College
and Safdarjung Hospital, New Delhi

Case Report: A 24 years old woman came with history of recurrent bleeding per vagina since spontaneous abortion 3 months back for which she had D & C done 3 times and received multiple transfusion. Urine pregnancy test was done keeping in mind differential diagnosis of Gestational trophoblastic neoplasia GTN and ectopic. The test was negative. Since there was high suspicion of GTN, pregnancy test was repeated in dilution to rule out "Hook Effect". The test became positive after diluting urine 4 times. The extremely elevated β-hCG levels, usually above 500,000 mIU/L, can saturate the receptors in test kit and result in negative pregnancy test, which is known as "Hook Effect" USG was done in hospital which revealed fluid and echogenic contents in uterus and free fluid in abdomen. Immediate Laprotomy was done in which an enlarged uterus with multiple small bleeding areas on posterior surface of uterus were seen and these areas had some infiltrating

growth coming out from inside the uterus. There was large collection of blood in abdomen. Hysterectomy was done and cut section revealed a growth inside uterus. Histopathology confirmed GTN.

Conclusion: When suspicion of GTD is present, pregnancy test if negative should be repeated in dilution.

"Nothing in life is to be feared, it is only to be understood. Now is the time to understand more, so that we may fear less".

- Marie Curie