AOGD BULLETIN

Volume 15; Issue No.6; October 2015

Price: ₹ 30 only

October is
BREAST CANCER
AWARENESS MONTH

Promote Health
Protect Rights
Provide Quality Services

Dedicated Issue:
Safe Labour: Every Woman's Right

AOGD SECRETARIAT
Room No-118, Ward 8, Deptt. of Obst & Gynae, VMMC & Safdarjung Hospital, New Delhi-110 029
Ph- 011- 26181879, 26714473, Email: aogdsjh2015@gmail.com

AOGD Office Bearers 2015-16

AOGD Office
Room No.118, Ward No. 8
Department of Obstetrics & Gynaecology
Vardhman Mahavir Medical College & Safdarjung Hospital
New Delhi-110 029
Tel.: 011 26181879, 26714473
email: aogdsjh2015@gmail.com
website: http://www.aogd.org

AOGD BULLETIN
Volume 15-6, October 2015

Contents

Publisher/Printer/Editor
Dr Jyotsna Suri on behalf of Association of Obstetricians and Gynaecologists of Delhi.

Printed at
Process & Spot C-112/3, Naraina Industrial Area, Phase-1, New Delhi 110 028

Published from
AOGD Office: Room No.118, Ward No. 8, Department of Obstetrics & Gynaecology, Vardhman Mahavir Medical College & Safdarjung Hospital New Delhi-110 029

AOGD Office-Bearers

Dr Pratima Mittal
President

Dr Sunita Malik
Vice President

Dr Achla Batra
Hon. Secretary

Dr Anil Kumar Jain
Treasurer

Dr Sunita Singal

Dr Monika Gupta

Dr Sarita Singh

Dr Sumitra Bachani

Joint Secretaries

Dr Anita Kumar

Dr Reeta Bansiwal

Co Treasurers

Editorial Board

Dr Jyotsna Suri
Editor

Dr S Shamsunder
Web Editor

Dr Rekha Bharti

Dr Harsha S Gaikwad

Co-Editors

Dr Garima Kapoor

Dr K Usha Rani

Co-Web Editors

Dr Archana Mishra

Dr Kavita Aggarwal

Dr Deepali

Dr Deepika

Dr Kashika

Assistant Editors

Committees

Dr B Das

Dr V Zutshi

Dr R Dewan

Dr Renu Arora

Scientific Committee

Dr H P Anand

Dr M Sharma

Dr Sonam

Dr Anjali Dabral

Monthly Meeting Coordinators

Dr Bindu Bajaj

Dr Beena Nilratna

Dr Sunita Yadav

Dr Sujata Das

Dr Kashika

Publicity Committee

Message from the President

Dear AOGD Friends

Warm wishes to all of you. Today I wish to talk to you about something which is nothing short of a miracle- that is the process by which an exact replica of our species sees the light of this world after undergoing the most difficult journey of its life consisting all of 10 centimetres! This beautiful yet hazardous experience which is arguably the most anticipated moment of a woman's life, can at times be catastrophic. Providing safe delivery and postpartum services is the primary and most essential component of emergency obstetric care. With the JSY and other schemes which promote institutional deliveries, we expect a further increase in the delivery rates in all the health facilities, in the coming years. The aim of all obstetricians should be to provide quality and protocolized management to all women in labour. At no point of time is it considered justified to compromise quality at the cost of quantity! My message to the budding obstetricians is that the skills of conducting normal and abnormal deliveries is essential to master, especially in the wake of the rising LSCS rate today. The present issue deals with the management of labour and its complications and intends to sharpen our obstetric skills.

October is celebrated as the breast cancer awareness month and it is my earnest appeal to all our colleagues, to contribute in dissemination of knowledge to the general public and the medical fraternity as well. Pregnancy & delivery can be taken as an oppurtunity to educate the patient and her faimly on this important issue.

I also take this opportunity to invite our esteemed members for the annual conference. We promise you all a memorable time at this scientific bonanza. Waiting eagerly to welcome you on 31st October and 1st November at the India Habitat Centre.

"Giving birth should be your greatest achievement –not your greatest fear"
- Jane Weideman

Dr Pratima Mittal
President, AOGD
drpratima@hotmail.com

From the Secretary's Desk

Dear Members,

We are here again with another appealing volume with the spirit to gratify our academic and fun loving readers. This volume just holds apt for our institute with the maximum number of deliveries and a significant chunk of high risk obstetrics. The labour room is an important place in every women and every obstetrician's life; for a patient it carries her lifelong memories regarding birth of her babies and if traumatic it can lead to long term psychological problems and personality disorder. For any centre which plans to deal with high risk obstetrics and deliveries, a well equipped labour room is the most strategic part, not only a skilled and disciplined staff but a well designed protocol which guides us through in the routine care or an unexpected situation is a must. After flipping through these pages, we hope it would dispel anxieties about labour room and make you more confident.

This month ultrasound course in fetal medicine culminated followed by distribution of certificates to our satisfied trainees. We carried on with our outreach activities in Aliganj led by Dr Rupali Dewan. The month was full of interesting activities beginning with urogynecology workshop at Safdarjung hospital, CTG workshop at Max Superspeciality Saket, workshop on concepts in cervical cancer screening & hands on LEEP at Sant Parmanand hospital and many more- the list doesn't end here.

We are all looking forward for your whole hearted participation in the forth coming AOGD conference as we gladly await your presence. We need your support and loads of good luck to accomplish it.

Dr Achla Batra
Hon. Secretary, AOGD
achla_batra@yahoo.com

AOGD Quiz

"AOGD Quiz" Oral Round to be held at Sir Ganga Ram Hospital, New Delhi on 23rd October, 2015 from 3:00pm - 4:00pm

All winners of theory round, should contact AOGD Office for registation for Oral Round. (Winners list on page 58)

AOGD Monthly Meeting Schedule 2015-16

Month / Year	Institute
Friday, 23rd October, 2015	**Sir Ganga Ram Hospital**
Friday, 27th November, 2015	MAMC & LNJP Hospital
Friday, 18th December, 2015	Hindu Rao Hospital
Friday, 29th January, 2016	LHMC & SSK Hospital
Friday, 26th February, 2016	UCMS & GTB Hospital
Friday, 25th March, 2016	ESI Hospital, Basaidarapur
Friday, 29th April, 2016	Apollo Hospital

From the Editor's Pen

Dear Friends

Greetings to all of you on behalf of the Editorial Team. The month of October brings with it a coolness of the breeze, foretelling the coming winter season and also brings with it the most important and awaited event of the AOGD Calendar- our Annual Conference. The AOGD Team is looking forward to welcome you all for this scientific feast.

This edition of our Bulletin is devoted to the issues related to labour and childbirth. The reader will be apprised about the latest advancements in the field such as the sonopartographic management of labour and the interventions for preventing primary caesarean sections. The challenging topics of sudden post-partum collapse, vaginal breech delivery, labour analgesia and birth asphyxia from the obstetrician's angle have been discussed comprehensively. The evidence based management of all the stages of labour has also been highlighted. The practical steps for PPH Management in the form of a flow chart and the WHO guidance for breast feeding in the postpartum period has been effectively summarized. The drug review discusses the role of Ropivacaine for labour analgesia. October is also the month of breast cancer awareness and hence an article, which most effectively elucidates the current guidelines for mammographic screening, has been included for the benefit of our Members.

The luminary featured this time, is an awe inspiring and most respected person of our fraternity, who has been a great inspiration to many generations of gynaecologists- Dr BG Kotwani. The Quiz and other regular features are also sure to interest our readers. We are grateful to our dynamic Vice President, Dr Sunita Malik, for her active participation and valuable inputs in planning this issue.

Wish you all a happy reading!

Dr Jyotsna Suri
Editor, AOGD
jyotsnasuri@gmail.com

Editorial board: (from Lt to Rt) Dr Kashika, Dr Kavita, Dr Rekha, Dr Jyotsna, Dr Harsha, Dr Deepali, Dr Deepika, Dr Archana

BREAST CANCER AWARENESS MONTH

Breast Cancer.....Listen to your body. Be aware!

Rupali Dewan[1], Krati Mehrotra[2], Abhinav Dewan[3]
[1]Consultant & Professor, [2]Medical Officer, [3]Senior Resident
[1]Department of Obstetrics & Gynaecology, VMMC & Safdarjung Hospital, New Delhi,
[2,3]Department of Radiation-Oncology, Rajiv Gandhi Cancer Institute and Research Centre, Delhi

The then first lady of the United States, Nancy Reagan was diagnosed with a suspicious lesion on a routine mammogram as a part of the annual examination in October 1987. She then underwent a biopsy of the lesion that confirmed that it was cancerous. She underwent a mastectomy and twenty eight years later she is still alive- 94 years young. She lost her husband Sir Ronald Reagan to Alzheimer's disease in 2004.

The moral of the story is

1. Early breast cancer is curable with no significant impact on normal life expectancy.
2. Mammography picks up cancers much before they appear or can be felt.
3. Mammography helps in early detection and thus saves lives from breast cancer.

The incidence of cancer has been increasing all over the world in the last decade. India in particular has been fast to catch up with the increasing trend. Breast cancer is no exception. In fact the rise in the incidence of breast cancer has been so rapid that it has overtaken cervical cancer and is the most common cancer among urban women. Presently it is predicted to affect one in 25 women in the major cities.

We may boast that we are still far behind the incidence in the developed world that is 1 in 8 in the United States. But more disturbing fact is that the number of deaths due to breast cancer is more in India than in the U.S. If we fail to take steps to curb this growing epidemic, then it will soon emerge as the most common cancer among Indian women with significant mortality.

The prime reason of breast cancer mortality is attributed to the advanced nature of presentation. The rationale for mammographic screening is to detect breast cancer at a stage when it is minute and impalpable. The fact that mammography saves lives have been proven beyond doubt by the Swedish two county trial of 77080 women. A 30% reduction in mortality was achieved in the screened group. The risk reduction was significant in the 50 + age groups. It was not so significant in the 40 – 49 year age group. The western countries implemented mammographic screening in the 50 + age group uniformly. However a consensus was not achieved in the 40 – 49 age group.

The Indian perspective

We have been passive onlookers to the whole phenomenon of mammographic screening upsurge and plateau in the west. The widespread mammographic screening has achieved early detection of breast cancers in the large proportion of women but has not helped to reduce the incidence of breast cancer. Secondly even though the survival of breast cancer has dramatically improved, it is difficult to attribute it singularly to mammographic screening, discounting increased awareness and the paramount advances in the treatment of breast cancer.

In the vast majority of rural population the incidence of breast cancer is lower than the urban population and hence may not substantially benefit from periodic screening mammogram. As far as the urban population is concerned increased awareness leads to early detection.

Although it is established that screening by mammography can substantially reduce mortality from breast cancer, especially in women over the age of 50 years, breast cancer screening programs involving imaging techniques are expensive and for this reason cannot be adopted in developing countries as a routine public heath measure. A more prudent approach would be to enhance **"breast awareness"** of the population, recommend a baseline mammogram of all women at the age 40 (Indian women have an earlier age of onset of breast cancer than their counterparts in West), screening of the high risk population and establish breast centers for asymptomatic women.

What is breast awareness?

Breast awareness implies familiarity with one's own breast. A self examination can be done monthly during bath, best time being just at the end of menses. This helps to keep in notice any irregularity, any lumps, the skin, the nipple etc. Breast awareness also includes a knowledge of breast cancer. A woman should be aware of what possible changes could occur in a breast when a cancer develops in the breast.

Screening saves lives. When you can service your cars regularly, why not your body? Your life is precious. Be breast aware.

Screening guidelines for early detection of breast cancer

Normal risk woman, 20 to 40 years of age:

- *Clinical breast examination:* This must be done every 1 to 3 years. Every year may sound impractical, but a visit to a doctor just once every three years should not be a problem.

Normal risk woman, more than 40 years of age:

- *Annual clinical breast examination*: A yearly examination by a qualified and trained medical personnel is a must.
- *Annual mammography*: From 40 to 50 years of age, yearly mammography is recommended. After 50 years of age, mammography may be done every 2 years.

Women with increased risk of breast cancer:

- *Annual clinical breast examination*
- *Breast awareness*
- *Annual mammogram*: For women, who have received radiation therapy to the chest, a mammogram should be done annually after 25 years of age. For those with a family history of breast or ovarian cancer, annual mammogram should start by 35 years of age. For women belonging to proven breast and ovarian cancer families (genetic) or those who have multiple first or second degree relatives with breast or ovarian cancers, annual mammogram must start much early, by around 25 years of age.
- *MRI of the breast*: In the above high risk categories, an annual MRI of the breast is also recommended as an adjunct to mammogram.

Evidence Based Management of Labour

Kanika Sylonia[1], Sunita Malik[2]
[1]Specialist, [2]Professor & Consultant, Department of Obstetrics and Gynaecology, [1]G. B. Pant Hospital, Port Blair, Andaman and Nicobar, [2]VMMC & Safdarjung Hospital, New Delhi

Giving birth is a life changing event. Women in labour should be treated with the utmost respect, and should be fully informed and involved in decision-making. To facilitate this, healthcare professionals and other staff caring for them should establish an empathetic relationship with women in labour and ask them about their expectations and needs, so that they can support and guide them. The care that she receives during labour has the potential to affect her- both physically and emotionally[1].

Management of first stage of labour

First stage: The first stage begins with regular uterine contractions, leading to cervical changes and ends when the cervix is fully dilated (10 cm). First stage can be divided into:

Latent or quiet phase

- Contractions are not particularly painful and at 5- 10 minute intervals.
- Contractions become stronger with shorter intervals, although the cervix is still dilating relatively slowly, with membranes possibly breaking later in this phase.

Active phase

- Starts with the cervix 3-4 cm dilated and is associated with more rapid dilatation normally at 0.5-1.0 cm/ hour.
- Once the cervix is dilated to 9 cm, towards the end of the active phase, contractions may be more painful and women may want to push.
- Pushing is undesirable at this stage; there is the need to establish by vaginal examination whether the cervix is fully dilated.
- During this time the fetal head descends into the maternal pelvis and the fetal neck flexes.

While the length of established first stage of labour varies between women, first labours last on average 8 hours (unlikely ≥18 hours). Second and subsequent labours last on average 5 hours (unlikely ≥12hr)[2]. The decision to intervene in prolonged first stage of labour must be taken on the basis of progress of dilatation and other obstetric factors rather than duration alone[1].

Admission- recommended with regular uterine contractions, cervical effacement >50% and dilatation 3-4 cm or a recent history of membrane rupture or bloody show. Patients who arrive with painful uterine contractions but not in active labour should be encouraged to return home[1,3], of course the other factors should be accounted for before decision.

History and examination- The goals are to review her prenatal record for medical and obstetrical conditions that need to be addressed intra partum. Check for development of new disorders since the last prenatal visit and establish the baseline cervical status, so that subsequent progress can be determined.

On admission to the labour unit, vital signs including blood pressure, pulse rate, respiratory rate, temperature, weight; frequency, quality and duration of uterine contractions and fetal heart rate should be noted[4].

Abdominal examination

1) Foetal lie, presentation and position.
2) Foetal size- macrosomic or growth restricted.
3) Amount of liquor.
4) Frequency, duration and quality of uterine contractions.
5) Foetal well being can be assessed by one minute post contraction foetal heart rate pattern. In low risk women, initial CTG recording is not recommended. In high risk women, CTG recording is necessary[4].

Vaginal examination

Should be performed, after excluding placenta previa and preterm PROM; and after taking informed consent. Privacy, dignity and comfort should be maintained[1,3,4]. Points to be noted are:

1. Whether membranes are intact or ruptured.
2. Cervical dilatation and effacement.
3. Foetal station- it is expressed as the number of cm. of the leading bony edge of the presenting part above or below the ischial spines; the maximum denominator is 5. If there is significant moulding and caput, then the descent can also be assessed in terms of fifths of the foetal head palpable above the pubic symphysis.
4. Foetal size and pelvic capacity- pelvis is assessed and then pelvic capacity according to foetal size is evaluated.

Lab. investigations

1. Haemoglobin and haematocrit- on admission if not possible, then Hb done at 26-28wk is considered to be adequate.
2. Blood, type and screen- Rh typing with negative antibody screen at the first prenatal visit is adequate for women at low risk of PPH.

   Rh type and antibody screen on admission in women with moderate risk of PPH/need of transfusion (multiple gestation, trial of labour after CS, preeclampsia/HELLP without coagulopathy and grand multiparity).

   Type and cross matching in women at high risk of PPH/ need of transfusion (placenta previa, placenta accreta, preeclampsia / HELLP with coagulopathy, severe anaemia, congenital or acquired bleeding disorders).
3. HIV- should be offered if not done earlier or undocumented.
4. HbsAg- who were not screened prenatally or who engaged in high risk behaviour for infection in past six months, recent or current drug abuse, under treatment of STI or have clinical hepatitis.
5. Syphilis- should be done in women who are at risk for syphilis.

Patient preparation

Patient should ideally have one to one care[1,3,4].

1. Enemas are not to be given routinely.
2. Catheterisation is not to be done unless the women are unable to void or urine output monitoring is required.
3. Perineal shaving is not recommended. If necessary then clipping of hairs to be done.
4. Oral intake of clear, isotonic fluids (coconut water, sport drinks, lucozade sport drink and even ORS) should be permitted during labour to avoid dehydration, ketosis and hypoglycaemia unless women require general anaesthesia during birth.
5. Do not routinely administer sodium citrate but give it to all before caesarean delivery.
6. Can take their usual medication orally however gastric absorption is unpredictable. If labour is advanced an alternate route is preferable.
7. If a woman is on prolonged glucocorticoids then empiric glucocorticoid coverage should be given.
8. Antibiotic prophylaxis is not necessary in vaginal delivery unless there is high risk of neonatal GBS infection.
9. Vaginal irrigation with antibiotic or antibacterial agent is not required.
10. Maternal activity and position- walking during the first stage did not enhance or impair active labour and had no harmful effects. She should assume positions that are comfortable for her unless specific positions are needed because of maternal foetal status or need for close monitoring[1,3,4].
11. Pain control- Various pharmacological and non-pharmacological methods can be used. It will be dealt separately.
12. Artificial rupture of membrane and oxytocin infusion should not be used routinely in labour that is progressing well/normally as it increases the risk of ascending infection, cord prolapse and operative interventions. Although ARM allows assessment of meconium passage but this information alone has poor prognostic value and does not affect labour management[1,4].
13. Monitoring- frequent maternal and foetal assessment is important as intra partum complications can arise rapidly even in low risk women. Foetal heart is monitored every 15 minutes in first stage of labour and every 5 minutes in second stage of labour in low risk women; every 5 minutes in first stage of labour and every 1 minute in second stage of labour in high risk women.
14. Continuous foetal heart rate electronic monitoring is recommended in high risk women only. In low risk women, intermittent monitoring (electronic or manual) is sufficient if women understands the risk and benefits of monitoring, has an uncomplicated pregnancy, normal foetal heart tracing and not resting in bed[1,4]. If intermittent auscultation show abnormal pattern then use CTG tracing for 20 minutes. If normal then return to intermittent auscultation[3].
15. Labour progress- is mainly assessed by cervical changes. If partogram is used to assess it then 4 hour action line is recommended[1]. Number of vaginal examinations should be kept to minimum. The frequency of vaginal examinations are[4]:
    - On admission
    - At 4 hourly interval in first stage
    - Prior to administering analgesia/anaesthesia
    - When parturient feels the urge to push
    - At 2 hourly interval in second stage
    - If foetal heart rate abnormality occurs

Management of second stage

Second stage: It is the period between full dilatation of cervix and foetal expulsion. It is subdivided into two phases. (WHO guidelines 2014)

1) ***Passive phase***- full dilatation of cervix without expulsion contractions. Duration is 2hours in nullipara with or without epidural whereas in multipara, 1hour without and 2housr with epidural.

2) ***Active phase***- when the foetus is visible or there are expulsion contractions during full dilatation or maternal pushing during full dilatation without expulsion contractions. Normal duration is 2 hours with epidural and 1hour without epidural in nullipara; and 1hr with or without epidural in multipara.

As long as foetal heart rate pattern is normal and some degree of progress is observed, there is no strict upper limit of duration of second stage but intervention is indicated, if lasts>4hours.

1. Perineal massage/ironing, with a sterile lubricant provides no apparent and significant advantage or disadvantage in reducing perineal trauma. So, though it is not harmful, it is not indicated either[1].
2. The application of hot compresses does not prevent perineal trauma[1].
3. Early or delayed pushing- decision is based on women specific factors like need to expedite delivery, maternal fatigue and maternal preference. Otherwise pushing in active phase only i.e. delayed is recommended[1].
4. Position for pushing- women can push in any position she finds comfortable like kneeling, squatting etc. Supine position should be avoided because of aortocaval compression[1,3,4].
5. Maternal position for delivery- if no foetal manipulation and complication is anticipated, delivery can be accomplished in any position she finds comfortable. Lithotomy is advantageous if foetal manipulation or need for optimal surgical exposure is anticipated[1,4].
6. Universal precaution should be taken while conducting delivery.
7. Episiotomy- routine episiotomy should be avoided. It should be reserved for deliveries with a high risk of severe perineal lacerations, significant soft tissue dystocia or need to facilitate delivery of a compromised foetus. If required then recommended technique is mediolateral starting at post commissure of the labia minora and 45-60degree from the vertical[1,4].
8. Fundal pressure and suprapubic pressure should be avoided as it increases the chances of uncontrolled delivery of head which leads to perineal laceration[1].
9. Manual protection of the perineum (perineal support) via controlled deflection of the head; asking the women not to push is more advantageous in preventing perineal laceration rather than perineal support only[1].
10. Delivery of the newborn- the responsibilities of the health care provider/obstetrician are:- 1) to reduce the risk of maternal perineal trauma and foetal injury; 2) to provide initial support to the newborn. Use hands on technique for delivery. Ask the women to make small expulsive efforts when the head is fully crowning, use one hand to maintain the foetal head in flexed position and control the deflection of head and speed of delivery of head and other hand to ease the perineum over the head[1,4]. If the cord is around neck slip it over the head or if not reducible then double clamp and transect the cord or slip it over the shoulders and deliver the body through the loop[1].
11. Mouth care- after delivery of head mucus is gently wiped from the mouth and nose. Most newborns who are vigorous at birth do not need suction even if meconium is present.
12. Cord clamping- delayed cord clamping decreases neonatal and infant anaemia and may facilitate the foetal to neonatal transition but should be within one minute. The location of the newborn above or below the level of placenta does not affect the volume of placenta to newborn transfusion. But the delayed clamping should never compromise the safety of the mother or newborn as in thick meconium with neonatal depression[1,4].
13. Cord milking is not recommended in place of delayed cord clamping[4].

Management of third stage of labour

The third stage of labour occurs between birth and placental expulsion[1]. The duration of third stage should be within 30 minutes after birth of neonate with active management or within 60 minutes with spontaneous third stage[1]. The duration of third stage depends upon gestational age. Preterm gestation takes longer[4].

Signs of separation- gush of blood; lengthening of cord; anterior-cephalad movement of the uterine fundus; fundus of uterus becomes globular.

Placental expulsion follows separation as a result of spontaneous uterine contractions, downward pressure from the developing retro placental hematoma and an increase in maternal intra-abdominal pressure[4].

Active management of third stage of labour is recommended [1,4]**.**

It reduces the risk of severe postpartum blood loss and blood transfusion. Active management consists of 1) prophylactic administration of an uterotonic agent before delivery of placenta. 2) controlled cord traction of the

umbilical cord after clamping and transaction; uterine massage may also be performed[4].

Preferred oxytocic is oxytocin, which is given as a 10 IU IM bolus with the birth of anterior shoulder or immediately after birth of baby and before the cord is clamped[3].

Perform controlled cord traction only after administration of oxytocin and signs of placental separation[3]. (without waiting for signs of placental separation in active management of third stage of labour). The preferred method is Brandt Andrews Manoeuvre. In this an abdominal hand secures the uterine fundus to prevent uterine inversion while the other hand exerts downward traction on the umbilical cord. If the cord avulses before delivery of placenta wait upto 30minutes for spontaneous placental separation and expulsion with maternal pushing. While waiting preparation for manual removal of placenta should be initiated. But if bleeding becomes heavy we should intervene promptly[4].

Do not use either umbilical oxytocin or prostaglandin routinely in the third stage of labour[4].

As the placenta emerges from the vagina, rotate it in circles and grasp the membranes with the clamp which helps to prevent them from tearing and possibly being retained in the uterine cavity. After the placenta delivers examine the placenta, umbilical cord and foetal membranes systematically. The foetal side is assessed for any evidence of vessels coursing to the edge of the placenta and into the membranes suggestive of succenturiate lobe. The number of vessels in the cord should be recorded[4].

Repair of lacerations- The cervix, vagina and perineum should be examined for evidence of birth injury. If a laceration is identified its length and position should be noted and repair should be done with adequate analgesia. After perineal repair, perform rectal examination to palpate sutures inadvertently placed through the rectal mucosa into the lumen and if identified they should be removed and repaired again.[4]

References

1. Clinical practice guideline on care in normal childbirth – WHO guidelines 2014.
2. NICE guidelines. August, 2015.
3. NICE guidelines on Intrapartum care: care of healthy women and their babies during childbirth. December 2014.
4. Lewis L, Hofmeyr GJ, Styles C. Management of labour and delivery. Up To date June 2015.

RECENT ADVANCES

Preventing Primary Caesarean Section

Swati Gupta[1], Roli[2], Sunita Malik[3]

[1]Senior Resident, [2]Post Graduate Resident, [3]Consultant & Professor, Department of Obstetrics & Gynecology, VMMC & Safdarjung Hospital, New Delhi

Williams preached "the excellence of an obstetrician should be gauged not by the number of cesareans which he performs, but rather by those which he does not do".

Cesarean section (c- section) is a life saving procedure for both mother and fetus in emergency cases but the alarming rise of c-section rates over the years is a matter of concern. In India, the rate of caesarean section delivery has increased from 3 percent to 10 percent between 1992-93 and 2005-06 (IIPS, 2007) which is lower compared to some developing nations like Brazil and China. Based on DLHS-3 data, the caesarean section delivery rate in India is 9.2 percent. In Delhi, cesarean section rate in teaching hospitals currently ranges between 19-35%[1]. According to the CDC 2005 report main contributors to the increasing c-section rate is the increased primary c-section done for the low risk pregnancies and also the increased repeat c-section performed for the low risk women. The increased repeat caesarean section for the low risk women is also contributed by the decreased VBAC rate over the years. As per the CDC data, only 11% of low-risk women who had a previous cesarean delivery went on to have a subsequent vaginal delivery, which is very low.

Of all, the major concern is, the cesarean section done for primigravida with single fetus in cephalic presentation. Increased primary c-sections expose the women to further plethora of problems in the subsequent pregnancies. Moreover, studies have not shown any added benefit of c-section in reducing the maternal and infant mortality rates[2]. So, there is definitely no doubt that primary c-section has been overused. Considering all this, there is an urgent need to plan the strategies to reduce the primary c-section rates which should include critically auditing the present indications for the low risk pregnancies.

There are numerous obstetric, fetal, and maternal indications for primary cesarean delivery, some of which may be preventable (Figure1). Importantly, there are very few absolute indications for cesarean, such as complete placenta previa, vasa previa, or cord prolapse. Other relative indications in order of frequency are labor dystocia, abnormal or indeterminate (formerly, nonreassuring) fetal heart rate tracing, fetal malpresentation, multiple gestation, and suspected fetal macrosomia.

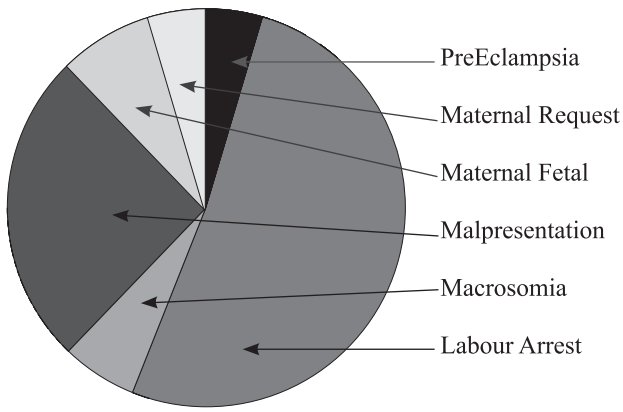


Fig 1. Indications for Primary C-Section

In 2012 ACOG and National Institute of Maternal and Child came together and proposed several recommendations to reduce the c-section rate in the nulliparous low risk women[3]. Also many authors over the years of observation conclude that reducing the primary caesarean section rate will reduce the overall caesarean section rate[3].

Labour induction

Timing of the labor induction has always been an obstetrical dilemma. It has been recommended that labor induction (using drugs or other methods) before the 41st week of pregnancy should generally be done for medical reasons[4]. Also it is important to use cervical ripening agents for the women with the poor Bishop.

It is highly recommended that caution should be taken before taking up the women for c-section for "failed induction". *Cesarean should not be used for unsuccessful labor induction until at least 24 hours of labor have passed without reaching a cervical dilatation of 6 centimeters and at least 12 to 18 hours if membranes are ruptured.* Further, the attempt to rupture membranes should only be done as soon as it is safe and effective. Moreover, arrest disorders should be clearly differentiated from the protacted labour. The diagnosis of arrest disorders should only be made after 6 cm of cervical dilatation has been achieved because it has been observed that duration of labour before 6 cm, in women who are being induced is longer.

Labour management practices

The concepts of labour come from Friedman, who proposed the classical curve to demonstrate the progress of the labour. Recently, studies doubt the relevance of the Friedman's concepts for the present day women. Research by the Consortium on Safe Labour, demonstrated that labor progression is slower than what was previously thought. Contemporary labor practices, such as epidural anesthesia, induction, laboring in bed, and frequent use of oxytocin differ substantially from labor management in Friedman's day.

First Stage of Labour

As proposed recently by ACOG, the active phase of labour should be identified after 6 cm and not from 4 cm, as it has been observed that more time is required to reach 6 cm of dilatation than was thought before. This resulted in unnecessary interventions for almost adequate rate of the cervical dilatation.

A prolonged latent phase i.e. more than 20 hours in the nulliparous women and more than 14 hours in the multiparous women should not be an indication of the caesarean section, as it has been observed that women in latent phase of labour will eventually progress to active stage with expectant management & only a few women will end up in arrest. Similarly slow but progressive labor in the latent phase should not be an indication for the c-section.

Diagnosis of arrest of first stage is made when more than 6 cm cervix dilation is reached with membrane rupture and one of the following: more than or equal to 4 hours of adequate contraction with no cervical change; more than or equal to 6 hours of inadequate contraction with no cervical change. If mother is still less than 6cm, she needs additional time and intervention before an arrest of labor can be diagnosed.

Second Stage of Labour

Before diagnosing arrest of labor in the second stage, if the maternal and fetal conditions permit, allow for the following: At least 2 hours of pushing in multiparous women & at least 3 hours of pushing in nulliparous women[3]. Longer duration may be appropriate on individualized basis (eg, with the use of epidural analgesia or with fetal malposition) as long as progress is being documented. Other management approaches for second stage are: 1) operative vaginal delivery; and 2) manual rotation of the fetal occiput for malposition.

Continuous labor support, such as labor doula care (companion who gives emotional support), reduces risk of cesarean. Midwifery care, doula support, mobility during the labour also decreases the incidence of faulty labour[5].

Fetal distress

It is another most common indication for the c-section. Electronic fetal heart rate monitoring is the commonly used modality to assess the fetal status, but it is associated with certain limitations including inter-observer variations in comprehending the fetal heart rate patterns and also low positive predictive value for the patterns for the adverse fetal outcomes. According to NICHD 2008, criteria, category 1 fetal heart rate patterns give good assurance of the normal fetal heart pattern and the category 3 pattern is highly suggestive of the deranged fetal acid base balance. Of the major concern is the fetal pattern falling under category 2 i.e. the indeterminate fetal heart rate patterns. Although for this, heightened alertness is recommended but robust intervention like c-section is not suggested. As per the guidelines, for such patterns resuscitative measures like changing mother position, improving hydration status, oxygenation, amnioinfusion, adjustment of the oxytocin drip to the mother, treating the maternal hypotension should be taken. It is observed that such measures might normalize the fetal heart rate patterns.

Another important aspect is the importance of the intermittent auscultation in the low risk pregnancies. Studies show that, continuous fetal monitoring doesn't add to the benefit over the intermittent auscultation in assessing the fetal condition in the low risk pregnancy. Moreover, using continuous fetal heart rate monitoring for such pregnancies might increase the unnecessary intervention.

Fetal malpresentation

Breech presentation complicate about 3.8% of pregnancies near term and most common mode of delivery for them is the c-section. External cephalic version is an effective non surgical mode of the management of the breech presentation successfully resulting in the normal vaginal delivery of the women. But over the years this technique has been used less frequently. Henceforth, patients should be offered external cephalic version at 36 0/7 weeks of gestation.

Excessive maternal weight gain

It has been observed that women with excessive weight gain in the pregnancy are at the risk of undergoing c-section and also the other adverse outcomes. They should also be counseled regarding the risk of development of the gestational diabetes mellitus and the subsequent poor consequences on the fetus. Women should be advised regarding the diet plan to control the weight gain in the pregnancy

Twin gestation

Studies show that cephalic/cephalic presentation of the fetuses in the twin gestation has a good prognosis and can be managed effectively without the surgical management. Therefore, vaginal delivery should be considered in the non-complicated cases.

Fetal macrosomia.

Cesarean is not appropriate for babies that are estimated to be large near the end of pregnancy as estimates are often wrong and many large babies are born vaginally. It may be appropriate if the baby is estimated to be at least 4,500 grams in women with diabetes and at least 5,000 grams in other women (5,000 grams, or 11 pounds, is rare).

Non- medical interventions

It has been observed that many factors come into play other than the medical ones in leading to the decision of the c-section. It could be the overall decrease in the apprehension related to the caesarean section especially in the face of borderline fetal heart rate abnormalities, protracted labor or arrest disorders. Several institutional factors like inability to support the prolonged inductions with the time and space and absence of the day to day auditing of the indications for which the c-section should be checked to reduce the c-section rates. Moreover, physician factors such as fatigue, work load, and anticipated sleep deprivation also affect decision-making & result in the increased rate of non indicated c-sections. The current medico-legal climate has also made the normal vaginal delivery less attractive to the physician in view of several complications associated with the vaginal delivery.

Henceforth, it could be concluded that increasing c-section rate is of significant concern for the medical system and any kind of necessary intervention should be done to reduce the primary c-section due to its major effect on the subsequent pregnancies.

References

1. Kambo, I., Bedi, N., Dhillon, B. S. & Saxena, N. C. A critical appraisal of cesarean section rates at teaching hospitals in India. Int. J. Gynaecol. Obstet. Off. Organ Int. Fed. Gynaecol. Obstet. 79, 151–158 (2002).
2. Walker, R., Turnbull, D. & Wilkinson, C. Strategies to address global cesarean section rates: a review of the evidence. Birth Berkeley Calif 29, 28–39 (2002).
3. American College of Obstetricians and Gynecologists (College) et al. Safe prevention of the primary cesarean delivery. Am. J. Obstet. Gynecol. 210, 179–193 (2014).
4. Sutton, A. L. et al. Delivery timing and cesarean delivery risk in women with mild gestational diabetes mellitus. Am. J. Obstet. Gynecol. 211, 244.e1–7 (2014).
5. Cox, K. J. & King, T. L. Preventing primary cesarean births: midwifery care. Clin. Obstet. Gynecol. 58, 282–293 (2015).

The Gold Standard

Wish there was a second choice
An option saving those gruelling moments
As I have heard of, once starts it never seems to end
Its severity is unparalled, the gold standard for any pain
There is no inkling, it possesses you n takes you through hell
But they say it's a test for motherhood, to teach her endurance
But that's what the old folks say, to carry those nine months its good enough
As with the good will obstetricians I have choices
The labour analgesia or a caesarean section
The baby's touch will empower me enough
No less than my contemporaries

- Dr Sarita Singh

From Subjective to Objective- Role of Sonopartogram in Monitoring Progress of Labour

Sarita Singh[1], Sunita Malik[2], Pallavi[3]

[1]Specialist, [2]Consultant & Professor, [3]Senior Resident, Department of Obsestrics & Gynaecology, VMMC and Safdarjung Hospital, New Delhi

The assessment of progression of labour is important for a healthy maternal and fetal outcome. The progression of the labour is assessed usually clinically by performing serial digital vaginal examinations in a labouring patient. The major limitations of serial vaginal examinations in monitoring the progression of labour is that it there can be a subjective bias causing inaccuracy; and also due to its invasive nature has the potential of introducing the ascending infection.

The two dimensional ultrasound has been recently (sonopartogram) used as an alternative non-intrusive method for assessing the progress of labour. In this method, (sonopartogram) serial recording of predetermined variables is done at the bedside by using an ultrasound and the variables are recorded on a chart to monitor the progress of labour.

There have been few studies comparing the standard digital vaginal examination and sonopartogram. In a pilot study done by W. A Hassan et al, the acquisition of data for progress of labor was more successful for sonopartogram than the conventional partogram. The agreement between digital vaginal examination (VE) and USG was good for cervical dilatation and head rotation but less so for head descent. They concluded that USG assessment of the progress of labor is feasible in most cases. In another study by WA Hassan et al, comparing the digital and USG findings for cervical changes and head descent, they found a close agreement between US technique and digital vaginal examination. In a latest study by Ki Hoon Ahn et al, intrapartun ultrasound was performed and various parameters were determined for evaluating labour progress and head perineum distance, angle of progression, head symphysis distance, and head direction to be a supplementary tool to digital examination in labour.

There are however few disadvantages of sonopartogram, namely that it require expertise, need of an ultrasound machine which is costly and that there is poor visualization of cervix when dilatation more than 9 cm.[2]

The parameters assessed and measured on a sonopartogram

The sonopartogram is done by using an ultrasound machine with a convex trans-abdominal transducer at a frequency of 4-6Mhz.The transducer is covered with normally used ultrasound gel and a sterile glove and various parameters are measured, as enumerated below in detail:

a. Cervical effacement and dilatation

The measurement of cervical dilatation is obtained by placing transducer transperineally at the level of

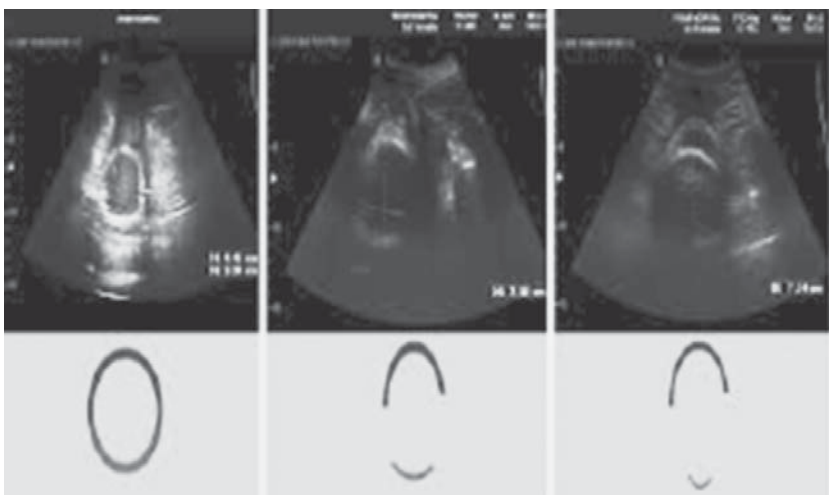


Fig 1. cervix > 75 %; cervix 50 – 75 %; cervix 25 -50 %

posterior fourchette in saggital position (Fig 1). The measurement of cervical dilatation is done in the anterior-posterior plane with cursors placed on inner part of cervical tissue anteriorly and inner part of cervical tissue posteriorly (inner to inner). The quality of cervical visualization by this method is assessed on a scale from 0-3.[1, 2]

Scale for cervical dilatation

0 < 25 % cervical circumference visible

1 25 – 50 % cervical circumference visible

2 50 – 75 % cervical circumference visible

3 > 75 % cervical circumference visible

b. Fetal head station

The markers used in measuring the fetal head station during labour include head perineum distance, angle of progression, fetal head symphysis distance, intrapartum translabial USG station and fetal head direction.

i) ***Head perineum distance (HPD)*:** It is assessed transperineally in transverse view by measuring distance between fetal head and perineum (Fig 2). It is the shortest distance in cms between outer bony limit of fetal skull and perineum[2,3]. It is used for evaluating fetal head engagement, time from premature rupture of membrane to delivery and the need for operative delivery.

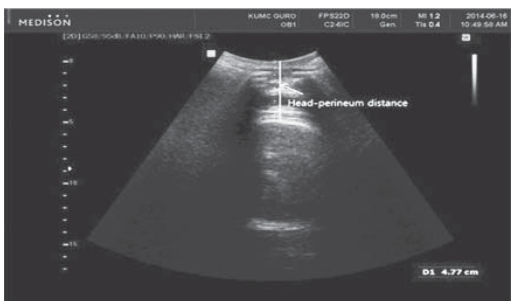


Fig. 2. Head perineum distance

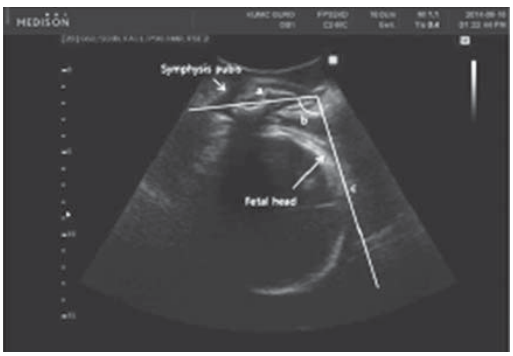
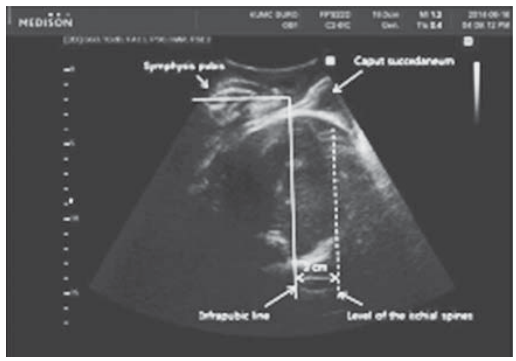


Fig. 3. Angle of progression- The long axis of pubic symphysis (a); angle of progression (b), line extending from the lowermost point of symphysis pubis tangentially to fetal skull contour (c).

ii) ***Angle of progression*:** The angle of progression is measured transperineally. Angle of progression is defined as the angle between a line drawn at the midline of symphysis pubis and a line running from the inferior apex tangentially to the fetal skull (Fig 3). An angle of progression > 99 degree is associated with vaginal delivery in 100% women and > 120 degree lead to the probable easy and successful either vacuum or spontaneous vaginal delivery in 90 % women.[3]

iii) ***Intrapartum translabial ultrasound station*:** This is longest visible axis of the fetal head between intersections with the deepest bony part of fetal head and the infrapubic line; 3 cm is subtracted for the level of ischial spine (Fig 4).[3, 4]



Head station = angle of progression × 0.0937 – 10.911

Fig. 4. Correlation between infrapubic line and ischial spine: the parallel line running through the projected level of ischial spines (dotted line) lies 3 cm caūdal to the infrapubic line.

iv) ***Head symphysis distance*:** This is a new parameter and it needs three dimensional USG machine. It is the distance between lowest margin of symphysis pubis and the nearest part of fetal skull along a line perpendicular to the long axis of symphysis pubis (Fig 5). The head symphysis distance negatively correlates with both fetal head stations assessed by digital examination and angle of progression[3].

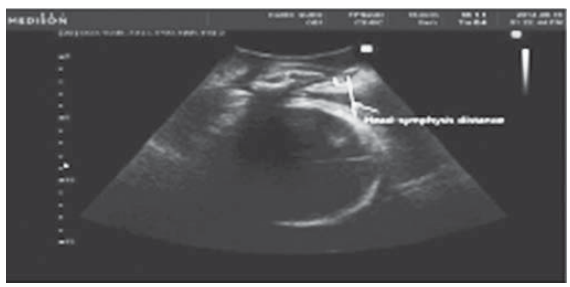


Fig. 5. Head symphysis distance- Distance between inferior edges of symphysis pubis to the nearest point of fetal skull along a line passing perpendicular to the long axis of the symphysis pubis.

v) ***Head direction*:** The head direction of fetal head is done by placing the probe in the head direction; it is important for assessing fetal head station due to the curved pathway of the pelvis (Fig 6). The downward, horizontal and upward direction of fetal head are associated with ≤ +1,≤+2 and ≥+3 cm distance from the ischial spine respectively[3,5]. The probability of station ≥+3 was specially high with upward direction of head combined with rotation <45°[3,5].

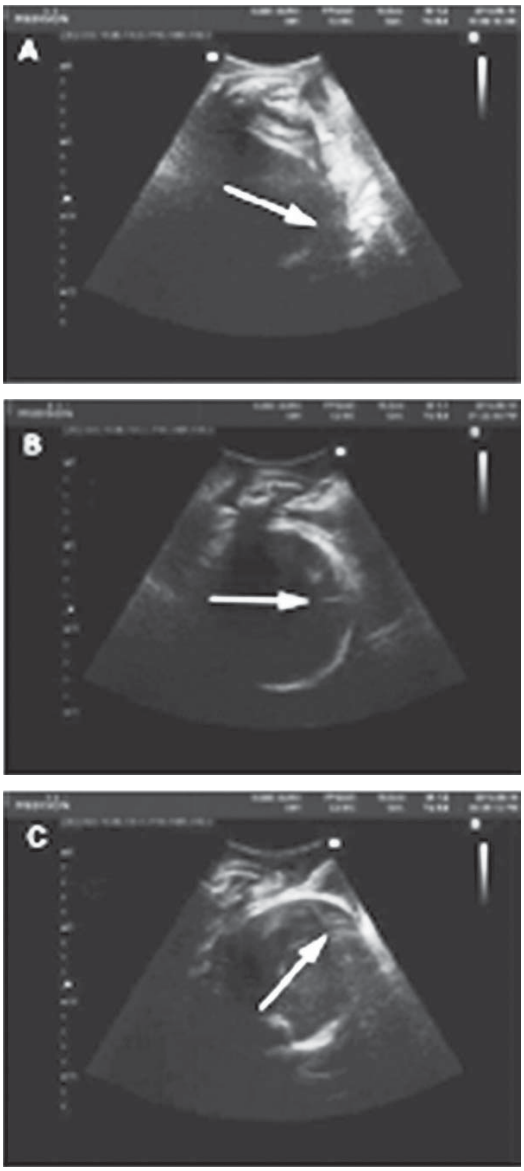


Fig. 6. Head direction on intrapartum translabial ultrasound. Categorization of fetal head direction (indicated by arrows) in longitudinal translabial ultrasonograms. (A) Downward (B) Horizontal (C) Upward direction.

c.) Fetal head rotation

Fetal head rotation (Fig 7) is measured using the spine or orbit as landmark and defining the occiput as denominator. It is expressed according to 12 hour clock as done in digital vaginal examination.[3] Head rotation is categorised as >45 or <45 degree with respect to the angle formed by echogenic midline of the fetal head and anteroposterior diameter of pelvis. Rotation of >45 degree is associated with station of <+2 cm in majority of cases as compared to rotation of <45 degree which is associated with >+3 cm in majority of cases.[3,5]

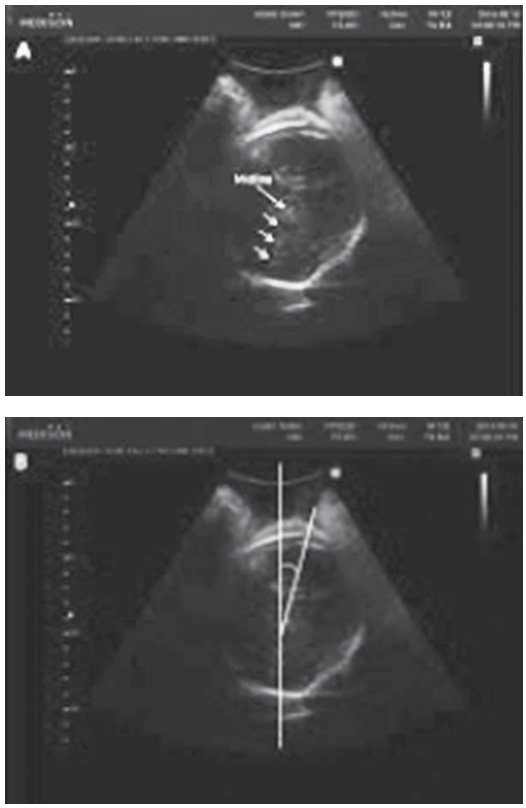


Fig. 7. Fetal head rotation; (A) The transducer is rotated to visualize the midline of fetal head. Head rotation is categorized as >45 degree or < 45 degree with respect to the angle formed by midline of fetal head. (B) Rotation < 45 degree is associated with lower station of +3 cm.

Conclusion

Thus to conclude, intrapartum ultrasound not only provides objective and quantitative data in labor (Fig 8), it also improves obstetrical outcome of both the mother and fetus. For assessing the progress of labour the simplest parameter are fetal head rotation, head descent and cervical dilatation. It can be used as a predictor for vaginal operative delivery. Thus, it changes the nature of assessment of labour from being a largely subjective skill to being a recordable science.

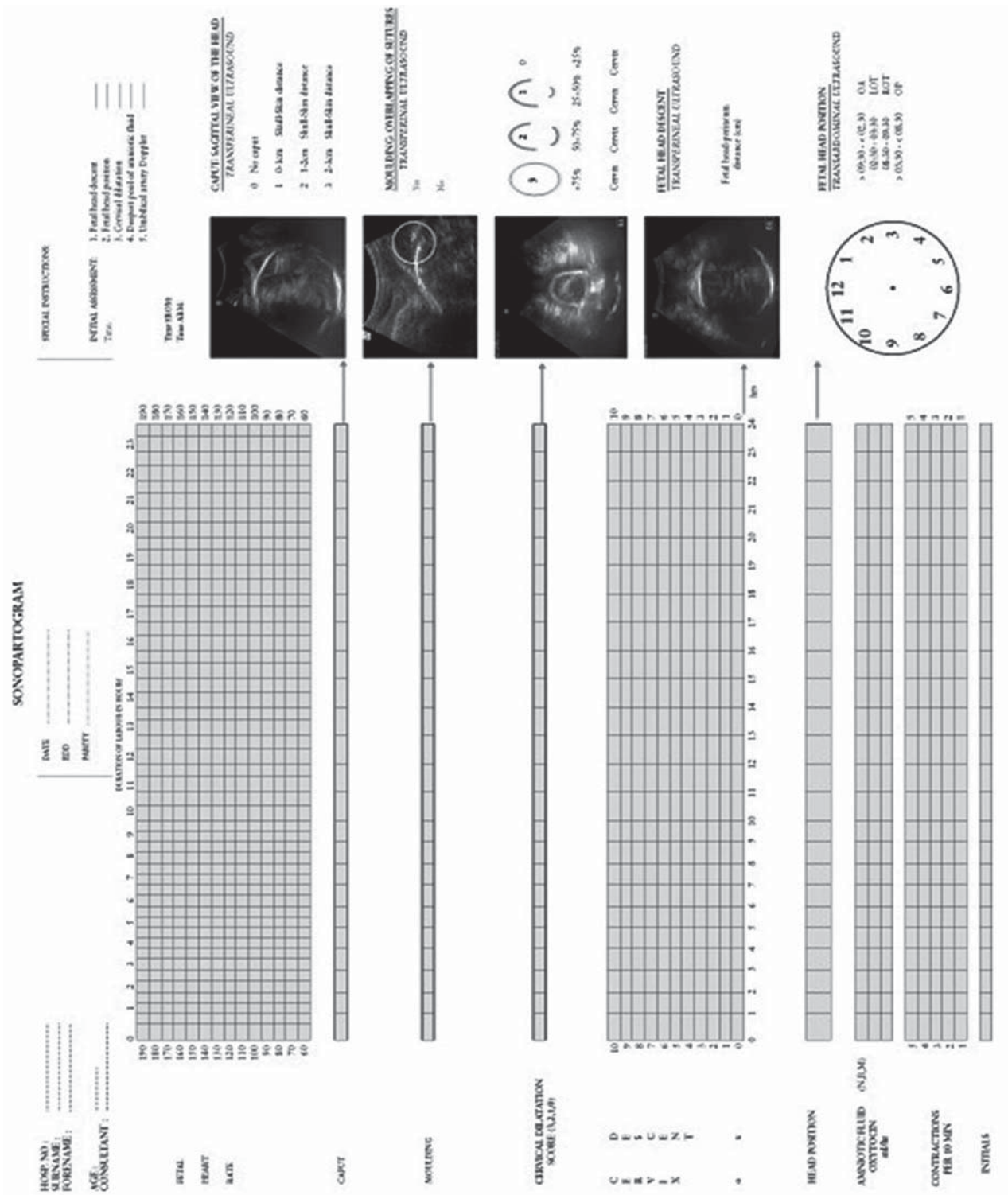


Fig. 8: Chart for plotting sonopartogram

References

1. W.A Hassan, T .M. Eggebo, M. Ferguson and C. Simple two –dimensional ultrasound rechnique to assess intrapartum cervical dilatation: a pilot study. Ultrasound Obstet Gynecol 2013; 41:413-418.
2. W.A Hassan, T. Eggebo, M. Ferguson, A. Gillet etal. The sonopatrtogram: a novel method for recording progress of labor by ultrasound. Ultrasound Obstet Gynecol 2014; 43:189-194.
3. Ki Hoon Ahn, Min –Jeong Oh. Intrapartum ultrasound: A useful method for evaluating labor progress and predicting operative vaginal delivery. Review Obstet Gynecol Sci 2014; 57 (6):427-435.
4. B Tutschek,T Braun,F Chantraine,W Henrich. A study of progress of labor using intrapartum translabial ultrasound, assessing head station, direction, and angle of descent.
5. Dominic Iliescu, Panagiotis Antsaklis, Daniela Paulescu et al. Applications of ultrasound in prelabor and labor. 10.5005/jp- journals- 10009-1249.

Vaginal Breech Delivery- A New Challenge to Our Specialty

Rachita Chawla[1], Saritha Shamsunder[2], Sanjida Yasmin[3]
[1]Post Graduate, [2]Senior Specialist, [3]Senior Resident, Dept. of Obstetrics & Gynaecology, VMMC & Safdarjung Hospital, New Delhi

Breech delivery constitutes 3-4 % of all the deliveries at term, although the percentage is much higher in preterm breech. The importance of breech presentation is due to the fact that perinatal mortality is increased 2 to 4-fold with breech presentation, regardless of the mode of delivery. The management of term breech is highly controversial and the decision regarding the mode of delivery is variable among different institutions and even among different clinicians in the same institution. The decision to perform planned cesarean delivery is often based on personal experience or a fear of litigation.

The evidence so far….

From the historical point of view, vaginal delivery of the persistent breech presentation had been the tradition since the first century A.D. Intended vaginal breech delivery was the common practice in most developing countries probably because the obstetricians were also more conversant in the technique of assisted breech delivery. However this protocol received a major setback in the year 2000 when Lancet published the results of the Term Breech Trial by Mary E Hannah, which clearly concluded that planned caesarean section is better than planned vaginal birth for the term fetus with breech presentation in terms of neonatal outcome[1]. It also concluded that the reduction in risk of neonatal/perinatal mortality from planned caesarean section compared with planned vaginal birth was much greater in countries with a low perinatal mortality rate (2/514 [0·4%] *vs* 29/511 [5·7%]; 0·07 [0·02–0·29]; p<0·0001), than in countries with a high perinatal mortality rate (15/525 [2·9%] *vs* 23/528 [4·4%]; 0·66 [0·35–1·24]; p=0·13) (Table 1). This finding occurred despite larger differences in rates of caesarean section between the planned caesarean section and planned vaginal birth groups for countries with a high perinatal mortality rate (90·1% *vs* 55·3%). The trial also concluded that as many as 39 caesarean sections might be avoided to save 1 serious infant morbidity or death in high perinatal mortality rate countries in comparison to as few as 7 additional caesarean sections in countries with low perinatal mortality rate[1].

Moreover in a set up like ours where percentage of women as high as 50 % in some districts are still having home deliveries or deliveries in nearby health centers where facilities for monitoring labour or skilled birth attendant may not be available, this observation might be pertinent[2].

Also in our set up the neonatal mortality rate may be as high as 30% according to the World Bank Data which negates the beneficial effect of caesarean section[3].

Goffinet et al in Belgium in 2000 concluded that in places where planned vaginal breech delivery is a common practice and where strict criteria are met before and during labour, planned vaginal delivery of singleton fetuses in breech presentation at term remains a safe option that can be offered to women[4].

Singh A et al in 2009 also found no significant statistical difference in the maternal and perinatal outcome between the planned caesarean section and vaginal breech delivery group[5].

Table 1: perinatal or neonatal mortality at < 28 days of age and serious neonatal morbidity.

Outcome	*Planned caesarean section*	*Planned vaginal birth*	*p value*
Perinatal /neonatal mortality or serious neonatal morbidity Low national PMR High national PMR	17/1039 (1.6%) 2/514 (0.4% 15/525 (2.9%)	52/1039 (5%) 29/511 (5.7%) 23/528 (4.4%)	0.0001
Perinatal / neonatal mortality Low national PMR High national PMR	3/1039 (0.3%) 0/514 3/525(0.6%)	13/1039 (1.3%) 3/511(0.6%) 10/528 (1.9%)	0.01
Serious neonatal morbidity Low national PMR High national PMR	14/1036 (1.4%) 2/514(0.4%) 12/522(2.3%)	39/1026 (3.8%) 26/508(5.1%) 13/518(2.5%)	0.00003

Table adapted from reference 1.

Despite this, the trend of offering planned vaginal breech delivery to women with singleton breech presentation at term is declining. A small family size nowadays may also be regarded as the reason behind obstetricians not wanting to take risks and thereby resorting to the 'safer' caesarean section route. The number of obstetricians well versed with the technique of conducting vaginal breech delivery is declining. If this trend continues, management of a woman with breech presentation at term admitted in advanced labor at a center where cesarean section cannot be performed urgently will face a serious problem and it will indeed be a very sad day for our specialty. In the seventh Annual Report of the Confidential Inquiry into Stillbirth and Deaths in Infancy, the most avoidable factor in causing breech stillbirths and death among breech babies was sub optimal care during labour[6]. Therefore skilled care in labour can make a lot of difference.

How do we counsel women with breech?

Women should be informed of the benefits and risks, both for the current and for future pregnancies, of planned caesarean section versus planned vaginal delivery for breech presentation at term. Women should be informed that planned caesarean section carries a reduced perinatal mortality and early neonatal morbidity for babies with a breech presentation at term compared with planned vaginal birth, however the long term health is not affected.[7] (RCOG Evidence level A)

Women should be advised that planned caesarean section for breech presentation carries a small increase in serious immediate complications for the mother, however there is no additional long term effect to the mother.[7] (RCOG evidence level A)

Women should be advised that the long-term effects of planned caesarean section for term breech presentation on future pregnancy outcomes for them and their babies is uncertain[7]. (RCOG evidence level C)

Women should be assessed carefully before selection for vaginal breech birth[8] (RCOG evidence level A). The role of external cephalic version has to emphasized. Women with a breech baby should be informed that attempting ECV lowers their chances of having a caesarean section. ECV should be offered from 36 weeks in nulliparous women and from 37 weeks in multiparous women. Women should be counseled that ECV reduces the chances of breech presentation at delivery.[8] (RCOG evidence level B)

Diagnosis of breech presentation for the first time during labour should not be a contraindication for vaginal breech birth.[8] (RCOG evidence level C)

Vaginal breech delivery

A practitioner skilled in the conduct of labour with breech presentation and vaginal breech birth should be present at all vaginal breech births. If a unit is unable to offer the choice of a planned vaginal breech birth, women who wish to choose this option should be referred to a unit where this option is available. Practitioners supervising labour with a breech presentation or carrying out vaginal breech birth should have appropriate training, which may include simulated training.

Vaginal breech birth should take place in a hospital with facilities for emergency caesarean section. Ready access to caesarean section is considered important, particularly in the event of poor progress in the second stage of labour.

Continuous electronic fetal heart rate monitoring should be offered to women with a breech presentation in labour.[7] (RCOG evidence level C)

Women should be advised that, as most experience with vaginal breech birth is in the dorsal or lithotomy position, that this position is advised.[7] (RCOG evidence level C)

Caesarean section should be considered if there is delay in the descent of the breech at any stage in the second stage of labour as failure of the presenting part to descend may be a sign of relative fetopelvic disproportion.[7] (RCOG evidence level C)

Breech extraction should not be used routinely[7]. The arms should be delivered by sweeping them across the baby's face and downwards or by the Lovset manoeuvre (rotation of the baby to facilitate delivery of the arms). There is no evidence to indicate which method should be attempted first. (Evidence level IV)

Delayed engagement in the pelvis of the aftercoming head: Suprapubic pressure by an assistant should be used to assist flexion of the head. The Mauriceau-Smellie-Veit manoeuvre should be considered, if necessary, displacing the head upwards and rotating to the oblique diameter to facilitate engagement. The aftercoming head may be delivered with forceps, the Mariceau-Smellie-Veitmanoeuvre or the Burns-Marshall method should be performed. Successful delivery both by symphysiotomy and by rapid caesarean section when attempts to deliver the aftercoming head are unsuccessful, have been described.

Conclusion

The term breech trial has proven that planned cesarean section is undoubtedly better than planned vaginal delivery. In countries where the majority of cesarean sections for breech presentation are done in emergency, a trial of vaginal delivery yields comparable results. Therefore, it is concluded that the decision about the

mode of delivery vests in the hands of woman and her family. Training, regular drills of external cephalic version and assisted breech delivery in all maternity units will go a long way in optimizing the outcome of breech delivery in a country like ours.

References

1. Hannah ME, Hannah WJ. Planned caesarean section versus planned vaginal birth for breech presentation at term: a randomized multicenter trial. Lancet. 2000; 356: 1375–1383.
2. National Family Health Survey 3 (2005-2006)
3. Data.worldbank.org/indicator/SH.DYN. NMRT
4. Goffinet F, Carayol M, Foidart JM, Alexander S, Uzan S, Subtil D, Bréart G; PREMODA Study. is planned vaginal delivery for breech presentation at term still an option? Results of an observational prospective survey in France and Belgium.Am J Obstet Gynecol. 2006 Apr; 194(4): 1002-11.
5. Singh A[1], Mishra N, Dewangan R.Delivery in breech presentation: the decision making. J Obstet Gynaecol India. 2012 Aug; 62(4): 401-5.
6. Confidential Enquiry into Stillbirths and Deaths in Infancy. 7th Annual Report. London: Maternal and Child Health Research Consortium; 2000 [www.cemach.org.uk/publications/7th_ Report.pdf].
7. RCOG guideline no. 20b, the management of breech presentation,4.2., Dec 2006.
8. RCOG guideline no. 20a external cephalic version and reducing the incidence of breech presentation. RCOG, Dec 2006.

CLINICAL UPDATE

Painless Labour- A Prerogative of Every Mother!

Saveena Raheja[1], Archana Mishra[2], Akriti Gautam[3]

[1]Senior Anaesthesiologist, [2]Assistant Professor, [3]Post Graduate, [1]Department of Anaesthesia, [2,3]Department of Obsestrics & Gynaecology, VMMC & Safdarjung Hospital, New Delhi

Nature has designed labour in a very systematic way but failed to attain perfection because the pain of labor is undoubtedly one of the most severe types of pain any human can experience. The delivery of the infant into the arms of a conscious and pain free mother is the most exciting and rewarding moments in medicine.

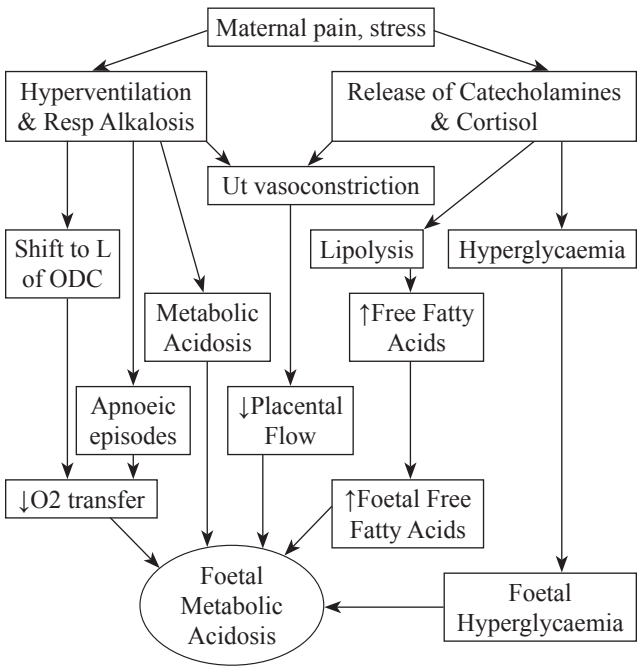
Relief of the pain of childbirth has always been associated with religious and cultural taboos, myths and controversies. Misinterpretation of biblical scripture (in sorrow thou shalt bring forth children) resulted in centuries of denial of pain relief, as clergy insisted that suffering in labor was consistent with divine intent.

History dates back to 1846, when James Young Simpson, a Scottish Obstetrician, gave ether to a woman during childbirth, which was strongly opposed. In 1853 John Snow made a remarkable breakthrough in obstetric analgesia when he administered chloroform to Queen Victoria for the birth of her eighth child Prince Leopold. More than a century and a half later, the effects of anesthesia on the progress of labor and the neonate continue to concern the anesthetist, obstetrician as well as the patients. Continuous research both clinical and scientific and increasing knowledge of physiology and pharmacology of pain and development of obstetric anesthesia as a subspecialty has increased the quality of labor pain relief. In India, however, the national acceptance of labor analgesia is almost nonexistent. Most of our patients, obstetricians and even some of the anesthesiologists are ignorant about the developments in the field of obstetric analgesia. Also the apathy of the medical fraternity to the patients' pain compounds the controversies associated with pharmacologic analgesia during labor.

Pain Pathway during labour

Uterine contractions and cervical dilatation result in visceral pain. These pain impulses are transmitted by afferent, slow conducting, A-delta and C fibers that accompany the sympathetic nerves and enter the spinal cord at the T10 to L1 level. As labor progresses, the descent of fetal head and subsequent pressure on the pelvic floor, vagina, and perineum, generates somatic pain, which is transmitted by the pudendal nerve (S2-4). The effects of unrelieved pain are detrimental not only for the mother but even for the fetus (Flow Chart 1)

Flow Chart 1: Effects of unrelieved pain during labour



Ideal labour analgesic

An ideal labour analgesic should not cross placental barrier and it should attenuate maternal anxiety, fatigue and deliver a healthy baby. It should be easy to administer and need minimal monitoring. Its effect should be rapid, profound, provide consistent analgesia while maintaining uterine contractility. Its action should be reversible if needed. If patient needs it should facilitate surgical anesthesia.

Techniques of labour analgesia

Various techniques have been described over the centuries for labor analgesia.

Non pharmacologic techniques[1]

1) Reassurance and relaxation technique; 2) hydrotherapy; 3) intradermal water blocks; 4) movement and positioning; 5) touch and massage; 6) acupuncture; 7) hypnosis; 8) transcutaneous electrical nerve

stimulation (TENS); 9) aromatherapy; 10) heat and cold; 11) childbirth education; 12) self-help techniques such as patterned breathing and relaxation; and 13) music and audio analgesia. Despite a large number of published articles, there are relatively few prospective trials of effectiveness of many of these techniques.

Pharmacologic

1. Inhalational

1880- Stanislav Klikovick, Nitrous oxide

1934- Divinyl Ether

1961- Turnstall, 50:50 Nitrous oxide: oxygen

1965- Approval of Entonox by Central Midwives board

1975- Isoflurane, 0.75% with Oxygen, 0.2% with Entonox (Isonox)

1984- 1% Enflurane in air

1995- Desflurane, 1-4.5% in oxygen;

later Sevoflurane 0.8% with oxygen was also used.

2. Systemic Analgesics

Intravenous labour analgesia- Since 1840 parenteral narcotics were widely used by gynaecologists for pain relief in labour. Pethidine is most widely used analgesia but some studies concluded greater risk of adverse neonatal outcome.

Intravenous ketamine was used as "Twilight Sleep" where patient do not remember the painful experience, was surrounded by controversy of compromising the airway; benzodiazepines have risk of neonatal respiratory depression.

Presently tramadol, fentanyl, pentazocine, butorphanol and ramifentanyl are drugs of choice for parenteral analgesia which could be administered by intramuscular, intravenous or patient controlled continuous infusion.

Doses

Fentanyl – I V bolus of 25-50 microgram/ hour or as continuous infusion of 0.25 microgram/ kg/ hour (suitable for PCA)

Tramadol – 1-2 mg/kg every 2-3 hourly

Butarphanol – 2-4 mg intramuscularly (causes more respiratory depression)

Remifentanil – 20 microgram IV bolus with lock period of 3 minutes on PCA pump

For reversing the neonatal effects of maternal opioid administration:

Dose of naloxone is 0.1 ml/kg intravenous in neonate during resuscitation. For reversing maternal respiratory depression 0.4 mg intravenous is the dose[2].

Our experience revealed more patient satisfaction with neuraxial analgesia than parenteral one; while parenteral analgesia has advantage of administration by gynaecologist and could even be patient controlled. In parenteral analgesia fentanyl has shown more pain relief on VAS, lesser side effects of respiratory depression and neuro behavioural changes in neonates were also found much lesser than described in literature.

All narcotics used for pain relief in labor can have adverse effects on mother and fetus. Maternal side effects may be cardiac, respiratory, GI, neurological and allergic. Fetal side effects depend on factors which affect the transfer of the drug to the fetus, the amount of drug, site of injection, maternal metabolism, renal or liver excretion of the drug, lipid solubility and protein binding. Uteroplacental blood flow is a very important factor[2].

3. Regional analgesia

In obstetric patients, regional analgesia refers to partial or complete loss of pain sensation below the T8 to T10 spinal level. In addition, a varying degree of motor block may be present, depending on the agents used. Advantages of regional analgesia include the following:

- Provides superior pain relief in first and second stages of labor
- Facilitates patient cooperation during labor and delivery
- Provides anesthesia for episiotomy and instrumental delivery
- Allows extension of anesthesia for cesarean delivery
- Avoids opioid-induced maternal and neonatal respiratory depression from intravenous opioids

With the advent of epidural analgesia, a new era of obstetric analgesia evolved. It is now the most widely used method for pain relief in labor. It involves an injection of a local anaesthetic into the epidural space close to the nerves that transmit pain. Epidural can be given as a bolus, continuous infusion or as a patient controlled pump (PCEA pump). The major advantage of this technique is that a low concentration of local anaesthetic along with an opiate gives a remarkable analgesia allowing the patient to maintain the ability to move around during labor (walking epidural) as well as cooperate in bearing down during vaginal delivery.

Indications

Maternal request is a sufficient medical indication for pain relief during labor. Analgesia is indicated for patients with certain risk factors even in the absence of maternal request. This is to help minimize the need for emergency anesthesia in patients for whom such anesthesia would be especially hazardous. These patients should be referred early to the anesthesia service for prompt consultation to permit a joint management plan. Besides providing analgesia in labor, regional analgesia may facilitate atraumatic vaginal delivery of twins, preterm neonates, and neonates with breech presentation. It also helps control blood pressure in women with preeclampsia by alleviating labor pain, and it blunts the hemodynamic effects of uterine contractions and the associated pain response in patients with other medical complications[2].

Contraindications

1. actual or anticipated serious maternal hemorrhage
2. refractory maternal hypotension
3. Coagulopathy
4. Sepsis
5. Raised intracranial pressure
6. Skin or soft tissue infection at the site of the epidural or spinal placement
7. Anticoagulant therapy.
8. Inadequate practitioner training and experience.

Continuous epidural infusion with and without opioids: The literature supports the induction of analgesia using epidural local anesthetics combined with opioids compared with equal concentrations of epidural local anesthetics without opioids for improved quality and longer duration of analgesia

Timing of neuraxial analgesia and outcome of labor: Meta-analysis of the literature determined that the timing of neuraxial analgesia does not affect the frequency of cesarean delivery. The literature also suggests that other delivery outcomes (i.e., spontaneous or instrumented) are also unaffected.

Combined spinal–epidural analgesia

This method is advocated widely as it has a faster onset time and equivalent analgesia with combined spinal–epidural (CSE) local anesthetics with opioids versus epidural local anesthetics with opioids. The literature is equivocal regarding the impact of CSE versus epidural local anesthetics with opioids on maternal satisfaction with analgesia, mode of delivery, hypotension, motor block, nausea, fetal heart rate changes, and Apgar scores. Meta-analysis of the literature indicates that the frequency of pruritus is increased with CSE so the dose of opiod has to be well titrated.

4. Pudendal nerve block

Use of pudendal nerve block for vaginal delivery was reported as early as 1916. However, the procedure did not become popular until 1953-54, when Klink and Kohl implemented the modified technique. The pudendal nerve arises from the second, third, and fourth anterior sacral trunks, which form a single trunk 0.5 to 1 cm proximal to the ischial spine. It leaves the main pelvic cavity through the greater sciatic notch. Pudendal anesthesia can be administered by gynaecologist only and does not require much monitoring. It can be a good alternative of neuroaxial anaesthesia in the following conditions.

- Analgesia for the second stage of labor
- Repair of an episiotomy or perineal laceration
- Outlet instrument delivery (to assist with pelvic floor relaxation)
- Used in the past as an alternative to neuroaxial analgesia in assisted twin and breech deliveries
- Minor surgeries of the lower vagina and perineum.

Technique: A pudendal nerve block targets the pudendal nerve trunk as it enters the lesser sciatic foramen, about 1 cm inferior and medial to the attachment of the sacrospinous ligament to the ischial spine. Here the nerve is medial to the internal pudendal vessels. This nerve is accessed by 2 approaches, transvaginal and transcutaneous (or perineal). The former approach is more reliable and is used most often, except when an engaged head makes vaginal palpation more difficult. The anatomical basis for both approaches is to block the nerve proximal to its terminal branches. It is given using an Iowa trumpet or similar guide (eg, Kobak) to facilitate the placement of the needle (20-22 gauge) (Fig. 1).

Figure 1: The needles used for pudendal nerve block

Recent advances in labour analgesia

These are ramifentanil for PCA (patient controlled analgesia) and low dose epidurals facilitating ambulation during labour. New drugs which have been introduced are new local anaesthesia such as ropivacaine, levobupivacaine, sufentanil, clonidine and neostigmine. New inhalational type of PCA have been developed using sevoflurane using special vaporizer. There are other advancements too, such as use of ultrasound in localizing epidural space have lowered the risk of failed epidurals. Introduction of patient controlled epidural analgesia (PCEA) pumps and computer integrated drug delivery system has revolutionized labour analgesia by customizing the regimen for individual patient.

Conclusion

Labour analgesia is a demand of modern time and we recommend that all the anaesthesiologists and obstetricians should be well versed with the technique. Every parturient should be informed and offered labour analgesia if willing.

References

1. Simkin PP, O'Hara M. Nonpharmacologic relief of pain during labor: Systemic reviews of five methods. Am J Obstet Gynecol. 2002;186:5;S131–59.
2. Chestnut DH. Chestnut's Obstetric anesthesia: Principles and practice. In: Chestnut DH, Polley LS, Tsen LC, Wong CA, editors. Philadelphia PA: Mosby Elsevier; 2009. pp. 405–501.

AOGD Annual Conference

37th Annual Conference of AOGD on 31st October and 1st November, 2015 at India Habitat Centre, Lodhi Road, New Delhi
www.aogd.org

AOGD Clinical Meetings

Next Clinical Meeting of AOGD on Friday 23rd October, 2015 at Sir Ganga Ram Hospital, New Delhi

FORTHCOMING EVENTS

- **Guest Lecture** by Dr John E Nestler on "Insulin Resistence and Physiologic and Therapeutic Role of Inositols" will be organized on 11th October 2015 from 7.30pm onwards at Le Meridian, New Delhi.
- **Youth Mela** under aegis of Adolescent Health Subcommittee of AOGD to be held on 8th October, 2015 at Jagan Institute of Management Sciences (JIMS), Rohini, Delhi.
- **Eighteenth PG Practical Course and CME** on 9th, 10th & 11th October, 2015 at MAMC Auditorium, Bahadur Shah Zafar Marg, New Delhi. www.mamc.ac.in
- **'Contraception Update and PPIUCD Insertion Technique'** will be organised on 17th October, 2015. at Hamdard Institute of Medical Sciences and Research and HAHC Hospital, New Delhi.
- "**AOGD Quiz"** oral round on 23rd October, 2015 from 3.00pm-4.00pm at Sir Ganga Ram Hospital, New Delhi.
- **Monthly Clinical Meeting of AOGD** will be held on 23th October 2015 at Sir Gangaram Hospital.
- **Live Infertility Workshop Basics to Recent** will be conducted by GSVM MedicalCollege at Kanpur on 27th November, 2015.
- **26th North-Eastern Obstetrics & Gynaecological Societies Convention (NEOGSCON**) being held from **27th-29th November, 2015** Gangtok, the capital city of Sikkim State, India. 3 workshops including LIVE Gynecological endoscopic surgery will be held.
- **FERTIVISION 2015- 11th Annual National Conference** of IFS will be held on 4th-6th December, 2015 at Hotel Ashok, New Delhi. www.indianfertility society.org

Meet the Luminary

Dr B G Kotwani

It was a pleasure to meet the warm hearted and welcoming Dr. B.G Kotwani. This encounter was a captivating experience for us; we were greatly inspired by the enthusiasm displayed by this illustrious person even at this juncture of life. Her plethora of achievements and accomplishments are remarkable and extremely alluring. Thank you, Madam for sharing the pearls of your wisdom with the AOGD members.

Dr Pratima Mittal, Dr Rekha Bharti

Birthday 27th May	**Place of birth** Karachi, now in Pakistan	**Graduation** Lady Hardinge Medical College (1952)	**Post-graduation** DGO (1954), MD (1958), Cama & Albless Hospital, Bombay, MRCOG (1959), FRCOG (1963), London
If not a gynaecologist, what would you have been? A Teacher	**What makes your day** Seeing my students achieving great heights	**Your strategy in a crisis** Involve fellow colleagues	
How do you de-stress? Watching cricket in combined consultant room of Sir Ganga Ram Hospital	**Any regrets** None	**One habit that you are proud of -** Discipline	
What ruins your day? Critically ill patients	**High point of your life ?** Joining Sir Ganga Ram Hospital	**What disappoints you?** Indiscipline	
Your role model Dr K C Mahajan	**Your favourite pastime** Watching television	**Favourite Movie** Baghban	**Favourite Singer** Lata Mangeshkar	**Favourite food** Aloo Puri

At work

Receiving "The Best Teacher's Award" at Ganga Ram Hospital

With Dr A Das after oration at NARCHI Conference

Your professional journey- I stood first among girls in the premedical test at Bombay University and was offered scholarship to do MBBS at Lady Hardinge Medical College. That year Dow Medical College opened in Karachi and I gave up scholarship to join MBBS at Karachi. However, due to India Pakistan partition after my first year, came to Delhi and completed MBBS from Lady Hardinge Medical College. Joined DGO at Cama Albless Hospital, Bombay and after completing DGO and MD from the same hospital, went to London to do MRCOG, which I completed in 3 months. Worked as registrar for 2 years in Gynaecology at LHMC and 1 ½ years at London, Leeds, Yolkshire Bournemouth, joined Lectureship for 8 months at Vellore Medical College and then joined Maulana Azad Medical College, worked as lecturer, Assistant Professor, Associate Professor, Professor and finally while working as head of the department, took premature retirement on 9th June 1982. Joined Sir Ganga Ram Hospital as active consultant and now retired active consultant till today.

What inspired you to become a gynaecologist? While working as a registrar at LHMC, I liked the subject and that inspired me to become an Obstetrician and Gynaecologist. Also, when I joined Cama and Albless Hospital at Bombay as DGO, within 2 weeks of joining I had to take up a competitive postgraduate examination that was compulsory for all Gynae postgraduate students. I competed with those who were preparing for more than 6 months to 1 year; stood first in the exam and that inspired me to do MD Gynae and MRCOG.

Any unfulfilled tasks? My postgraduate students at Maulana Azad Medical College and Sir Ganga Ram Hospital wanted me to write a book that I have not yet written

Helpless moment of your early professional life- None

Your current state of mind- I enjoy clinical work and am very fond of teaching DNB students

A piece of advice you want to give to a budding gynaecologist- I advice my female doctors not to become an Obstetrician as there are day and night emergencies to deal with and they need to look after their family also, rather male doctors should become Obstetricians and Gynaecologists.

What does AOGD mean to you? - Thoroughly professional body giving excellent academic knowledge to budding gynaecologists

Achievements and awards-

During school, in 4th or 5th standard I got the best student award for excellence in both academic and extracurricular activities

Scholarship to do MBBS at LHMC as I stood 1st among girls in the Premedical test at Bombay University

Award for "Best Teacher" at Sir Ganga Ram Hospital, in 2013,

"Lifetime Achievement Award" in 2014

AOGD Secretary for 5 years

External examiner for MBBS, MD and DNB examination in almost all the states of India from North to South

External examiner for MBBS at Libya University, was offered a teaching job there that I declined

Learnt culdoscopy at Mount Sinai Hospital and did MTPs and Laparoscopies at John Hopkins University and was teacher to North India Professors for Laparoscopy

Events Held

Events held under the aegis of AOGD in September 2015

- Urogynaecology Workshop "Conservative Management of SUI- Pessary, Biofeedback PFMT" by Urogynaecology Subcommittee of AOGD held on 4th September, 2015. Safdarjung Hospital, New Delhi
- CTG Workshop "Understanding Electronic Fetal Monitoring" under AOGD Fetal Medicine and Genetic Subcommittee held on 5th September, 2015 at Auditorium Max Super Speciality Hospital, Saket, New Delhi
- CME on Menopause by EDGF under aegis of AOGD on 8th September, 2015 at Lemon Tree Hotel, Ghaziabad
- CME on Recurrent Pregnancy Loss in association with Safe Motherhood Committee of AOGD held on 12th September, 2015 at Hindu Rao Hospital, Delhi
- CME on Fertility Preservation in Breast Cancer under Breast Cancer Prevention Committee of AOGD held on 12th September, 2015 at Apollo Hospital, New Delhi
- Guest Lecture by Dr Fadi Mirza "Current Updates and Controversies in Progesterone usage in Early Pregnancy" held on 16th September, 2015
- New perspectives in Obstetrics Guest lecture by Dr Poitr Lesney on 18th September at VMMC & Safdarjung Hospital
- CME organised by Multi Disciplinary Patient Management sub committee in association with North Zone AICC RCOG held on 19th September, 2015 at Indraprastha Apollo Hospital.
- Cancer Detection Camp organized by Navoothan Charitable Foundation in Association with AOGD on 20th September, 2015 at Gurgaon.
- Full Day CME "Common Gynaecological Disorders and Fetal Medicine" Under Aegis of AOGD held on 20th September, 2015 at Max Super Speciality Hospital, Saket, New Delhi
- Outreach Programme for "Comprehensive Women's Health" on 22nd September, 2015 by Dr Rupali Dewan at Aligunj.
- AOGD Reproductive Endocrinology, Adolescent Health Subcommittees and DGF North CME: AUB-HMB in Adolescent at Fortis Hospital Shalimar Bagh on 23rd September, 2015
- Monthly Clinical Meeting of AOGD held at RML Hospital on 24th September 2015.
- Workshop "Current Concepts in Cervical Cancer Screening & Hands on LEEP" by ISCCP & Oncology Subcommittee of AOGD held on 26th September, 2015 at Sant Parmanand Hospital, Delhi.
- 3rd Module of course of USG in Third Trimester on 26th September for AOGD Members by Dr Anita Kaul held at Safdarjung Hospital, New Delhi.
- One Day, FOGSI Gestosis Certificate Course on "Hypertensive Disorders in Pregnancy" held on 27th September, 2015 at Hotel Royal Plaza, Ashoka Road, New Delhi.

CME on Recurrent Pregnancy Loss at Hindu Rao Hospital

UPCOG Quiz in Association with AOGD at AIIMS

CME by Safe Motherhood Committee at Saket City Hospital

Vice President and Secretary AOGD at FOGSI Managing Committee Meeting, Mumbai

CME on Menopause by EDGF at Lemon Tree Hotel, Ghaziabad

AOGD President at Noida Obst & Gynae Society CME

Cancer Detection Camp- Medical Team from Safdarjung Hospital

CME on Common Gynaecological Disorders and Foetal Medicine, Max Superspeciality Saket

CME on New Perspectives in Obstetrics at Safdarjung Hospital

AOGD Monthly Clinical Meeting at RML Hospital

FOGSI Gestosis Certificate Course at Hotel Royal Plaza

Workshop “Current Concepts in Cervical Cancer Screening & Hands on LEEP”, Sant Parmanand Hospital, Delhi

CME on AUB in Adolescents at Fortis Shalimar Bagh

CME on Urogynae Workshop at Safdarjung Hospital

37th Annual Conference of Association of Obstetricians & Gynaecologists of Delhi

Theme: ***"Preventive Health & Critical Care in Obstetrics & Gynaecology"***

Conference: 31st October, 2015 - 1st November, 2015 **Venue:** India Habitat Center, Lodhi Road, New Delhi

Scientific Programme

Day 1 : 31st October, 2015 — **Hall A (Stein Auditorium)**

08:00-Onwards	**Registration**		
08:30-09:00	**Session I- Invited Videos - Laparoscopic Surgery**	**Speaker**	**Chairperson**
	Tricky Situations-How to deal with them	Dr Neena Bahl	Dr Pikee Saxena Dr Neerja Malik Dr Sumitra Bachani
	Pelvic abscess management	Dr Punita Bhardwaj	
	Hysteroscopic resection of cesarean scar pregnancy	Dr Renu Mishra	
	Cervical cerclage for incompetent os	Dr Neema Sharma	
09:00-10:00	**Session II New Horizons**	**Speaker**	**Chairperson**
	Rationalizing blood component therapy	Dr Navneet Magon	Dr Shammi Bhasin Dr Amita Saxena Dr Saritha Shamsunder
	New concepts in labour management	Dr Poonam Shiv Kumar	
	Multiple pregnancy-Minimising complications	Dr Kanwal Gujral	
	Pre eclampsia-New insights in diagnosis and mangement	Dr Ashok Kumar	
10:00-10:45	**Session III Obstetric Emergencies: Call for action**	**Speaker**	**Chairperson**
	Postpartum collapse	Dr Alpesh Gandhi	Dr Manorma Singh Dr Chitra Raghunandan Dr Pushpa Singh
	Altered sensorium in pregnancy	Dr Harsha Gaikwad	
	ARDS in Pregnancy	Dr Jyotsna Suri	
10:45-11:00	**Tea Break & Exhibition**		
11:00-11:30	**AOGD Oration**		
		Orator	**Chairperson**
	Professionalism, humanism & atechnical skills for Ob Gyn	Dr U P Jha	Dr Kamal Buckshee Dr Sunita Malik Dr Shashi Prateek
11:30-12:00	**Inauguration & Felicitation**		
12:00-12:30	**Invited Lecture 1**	**Speaker**	**Chairperson**
	Tackling midlife crisis through hormone therapy-Whats new	Dr Jaideep Malhotra	Dr Sharda Jain Dr Neerja Goel Dr Maninder Ahuja
12:30-13:00	**Invited Lecture 2**	**Speaker**	**Chairperson**
	Female genital tract anomalies-From diagnosis to Intervention	Dr Alka Kriplani	Dr Swaraj Batra Dr Sudha Salhan Dr Indrani Ganguli
13:00-14:00	**Lunch & Exhibition**		
14:00-15:15	**Competition Papers**	**Presentors**	**Judge**
			Dr SS Trivedi Dr Harsha Khuller Dr Amita Suneja Dr Anil Jain
15:15-16:00	**Session IV The Quest continues**	**Speaker**	**Chairperson**
	Non lethal anomoly detected-What next	Dr Deepika Deka	Dr Bharti Minocha Dr Anita Kaul Dr Raka Guleria
	New horizons in fetal medicine	Dr Soma Mukherjee	
	Hydrocephalus-Should it be drained.	Dr Chandra Mansukhani	
16:00-17:00	**Session V Panel -**	**Panelists**	**Moderator**
	Legal tangles in Obs & Gynae	Dr Gouri Devi	Dr Hitesh Bhatt
		Dr Sonia Malik	
		Dr Manisha Malhotra	
		Dr Rita Bakshi	
		Dr Sangeeta Gupta	
		Dr Shelly Kamra	
17:00-Onwards	**Tea**		

Day 1 : 31st October, 2015 — **Hall B (Silver Oak)**

08:00-Onwards	**Registration**		
09:00-10:00	**Session I New Horizons**	**Speaker**	**Chairperson**
	Role of AMH in infertility	Dr Surveen Ghumman	Dr Kanad Dev Nayar Dr Susheela Gupta Dr Bindu Bajaj
	Endometrium in infertility management	Dr Banashree Das	
	Challenges in managing a hirsute PCOS	Dr Sonia Malik	
10:00-10:45	**Session II Panel -**	**Panelists**	**Moderator**
	Unexpected challenges in gynae surgery	Dr Vijay Gupta (CTVS Surgeon)	Dr Vijay Zutshi
		Dr Pawan Vasudev (Urologist)	
		Dr R S Mohil (Surgeon)	
		Dr Indu Chawla (Gynaecologist)	
10:45-11:00	**Tea Break & Exhibition**		
11:00-11:30	**AOGD Oration**	**Orator**	**Chairperson**
	Professionalism,humanism & atechnical skills for ObGyn	Dr U P Jha	Dr Kamal Buckshee Dr Sunita Malik Dr Shashi Prateek
11:30 -12:00	**Inagration & Felicitation -**		
12:00-12:30	**Invited Lecture 1**	**Speaker**	**Chairperson**
	Tackling midlife crisis through hormone therapy-Whats new	Dr Jaideep Malhotra	Dr Sharda Jain Dr Neerja Goel Dr Maninder Ahuja
12:30-13:00	**Invited Lecture 2**	**Speaker**	**Chairperson**
	Female genital tract Anomalies-From diagnosis to intervention	Dr Alka Kriplani	Dr Swaraj Batra Dr Indrani Ganguli Dr Sudha Salhan
13:00-14:00	**Lunch & Exhibition**		
14:00-14:45	**Session III New Insights- Preventive Oncology**	**Speaker**	**Chairperson**
	Updates on HPV Vaccines	Dr Neerja Bhatla	Dr Raksha Arora Dr Ramesh Sarin Dr Tarini Taneja
	Understanding BRCA in breast cancer screening	Dr Seema Thakur	
	Role of biomarkers in gynaecological malignancies	Dr Shalini Rajaram	
14:45-15:30	**Session IV The Quest continues**	**Speaker**	**Chairperson**
	Current management of Ca endometrium	Dr Kanika Gupta	Dr Sanjivni Khanna Dr Gauri Gandhi Dr Dolly Chawla
	Laparoscopic radical hysterectomy	Dr Hafeez Rehman	
	Fertility conservation in gynaecological malignancies	Dr Mala Srivastava	
15:30-16:15	**Session V Tailoring management of fibroids**	**Speaker**	**Chairperson**
	Fibroid management in infertility	Dr Bharti Dhorepatil	Dr M D Goswami Dr Anjali Tempe Dr Malabika Roy
	Medical management of fibroids	Dr Anjila Aneja	
	Large Fibroids- laparoscopy or laparotomy	Dr Malvika Sabhrawal	
16:15-17:00	**Session V Mixed Bag**	**Speaker**	**Chairperson**
	DHEA in low ovarian reserve	Dr Kaberi Banerjee	Dr Archana Verma Dr Jyoti Bhaskar Dr Mamta Mittal
	3D-4D Ultrasound in obstetrics- A break through or gimmick	Dr Raghav Aggarwal	
	Doppler in Obstetrics-PE & IUGR	Dr Shabnam Bhandari Grover	

Day 2 : 1st November, 2015 **Hall A (Stein Auditorium)**

08:30-9:00	**Session I Invited Videos-Mixed Bag**	**Speaker**	**Chairperson**
	Laparoscopic sling surgery for prolapse	Dr Manju Hotchandani	Dr Sushma Rani Dr Anjili Aneja Dr Monika Gupta
	High utero saccral suspension	Dr Dinesh Kansal	
	Endoscopy in adnexal masses	Dr Ramandeep Kaur	
	Adenomyomectomy	Dr Nikita Trehan	
09:00-10:00	**Session II Guideline Capsules**	**Speaker**	**Chairperson**
	HIV in pregnancy - What has changed	Dr Rekha Bharti	Dr Alka Gujral Dr Kishore Rajurkar Dr Upma Saxena
	Preterm labor -Optimising outcome	Dr Renu Arora	
	Decoding APLA	Dr Reva Tripathi	
	Preconception counselling	Dr Nutan Agarwal	
10:00-10:45	**Session III Medical Disorders in pregnancy - Case Based Discussion**	**Speaker**	**Chairperson**
	Risk assessment and management of cardiac patient in pregnancy	Dr Manjula Sharma	Dr Prabal Rajwashi Dr H S Isser Dr Dinesh Singhal Dr Smiti Nanda
	Pregnancy management in patients with underlying renal Disease	Dr Geeta Radhakrishnan	
	Jaundice in pregnancy – Management dilemmas	Dr Abha Singh	
10:45-11:00	**Tea Break & Exhibition**		
11:00-11:45	**Session IV Breaking news in Obstetric & Gynaecology**	**Speaker**	**Chairperson**
	New therapies for RPL	Dr Mala Arora	Dr Brig S Mohan Dr Renuka Sinha Dr Mamta Gupta
	Oral hypoglycemic agents in pregnancy	Dr Deepti Goswami	
	Mild IVF	Dr Kuldeep Jain	
	Confusion to clarity in antenatal USG	Dr Narender Malhotra	
12:00-12:30	**Brig. Khanna Oration**	**Speaker**	**Chairperson**
	Evolution of surgery for epithelial ovarian cancer - How much is adequate	Dr Somashekher	Dr S K Das Dr S K Ghai Bhandari Dr S B Khanna Dr Urmil Sharma
12:30-13:00	**FOGSI President Oration**	**Orator**	**Chairperson**
	Laparoscopic tissue extraction- controveries & new solutions	Dr Prakash Trivedi	Dr S N Mukherjee Dr P Chadha Dr Sheila Mehra
13:00-14:00	**Lunch & Exhibition**		
14:00-15:00	**Session V Panel -**	**Panelists**	**Moderator**
	Infections in pregnancy (H1N1, Dengue, Malaria)	Dr J C Suri Dr Nivedita Sarda Dr Poonam Yadav Dr Ragini Agrawal	Dr Sunita Malik Dr Reeta Bansiwal
15:00-16:00	**Session VI Point Counter Point**	**Speaker**	**Chairperson**
	Pregnancy beyond 40 weeks-Should we wait	Dr Garima Kapoor-**For** Dr Pinkee Saxena-**Against**	Dr Bani Sarkar Dr Neeta Dabai Dr Usha Gupta
	Cord blood banking -Are we ready for it	Dr Bindiya Gupta-**For** Dr Sumitra Bachani-**Against**	
	Isolated oligoamnios in 3rd Trimester-Is action required	Dr Monika Gupta-**For** Dr Kiran Guleria-**Against**	
16:00-16:30	**Slogan Competition**		
16:30-17:00	**Valedictory Ceremony & Thanks Giving**		
17:00-Onwards	**Tea**		

Day 2 : 1st November, 2015 **Hall B (Silver Oak)**

09:00-10:00	**Session I Problem based case discussions**	**Speaker**	**Chairperson**
	Endometriosis in young woman-Choice of treatment	Dr Lalita Badhwar	Dr Nirmala Aggrwal
	Recurrent endometriosis -A challenge to clinician	Dr Renu Mishra	Dr Reena Yadav
	Conservative management of adenomyosis	Dr Geeta Chadha	Dr Sujata Das
10:00-10:45	**Session II Urogynaecology - Whats In!**	**Speaker**	**Chairperson**
	OAB- Treatment options	Dr Geeta Mediratta	Dr Ranjana Sharma Dr J B Sharma Dr Sonal Bathla
	Biofeedback for incontinence	Dr Aparna Hegde	
	Botox for urinary dysfunction	Dr Anup Gupta	
10:45-11:00	**Tea Break & Exhibition**		
11:00-11:45	**Session III Contraception Capsule**	**Speaker**	**Chairperson**
	Expanding the choice of contraception	Dr S K Sikder	Dr Suneeta Mittal Dr Dinesh Baswal Dr Jyoti Sachdeva
	Contraception Wheel	Dr Sunita Singal	
	Are we justified in doing intra caesarean IUCD insertion	Dr Kavita Aggarwal	
11:45-12:00		**Speaker**	**Chairperson**
	Assessing maternal morbidity in India	Dr Pratima Mittal	
12:00-12:30	**Brig. Khanna Oration**	**Orator**	**Chairperson**
	Evolution of surgery for epithelial ovarian cancer - How much is adequate	Dr Somashekher	Dr SK Das Dr SK Ghai Bhandari Dr Urmil Sharma Dr S B Khanna
12:30-13:00	**FOGSI President Oration**	**Orator**	**Chairperson**
	Laparoscopic tissue extraction- Controveries & new solutions	Dr Prakash Trivedi	Dr S N Mukherjee Dr P Chadha Dr Sheila Mehra
13:00-17:00	**Lunch & Exhibition**		
14:00-15:00	**Session IV Guideline Capsules**	**Speaker**	**Chairperson**
	Ovarian stimulation in extreme cases- PCOS, Low reserve	Dr Neeta Singh	Dr Veena Ganju Dr Manju Khemani Dr Kiran Aggrwal
	Male infertility- What a gynaecologist must know	Dr Pankaj Talwar	
	Luteal phase support-When,what and how long	Dr Sudha Prasad	
	Melatonin- New approach in infertility	Brig R K Sharma	
15:00-16:00	**Session V Point Counter Point**	**Speaker**	**Chairperson**
	Empirical ATT for infertility in India-Is it indicated	Dr Chitra Setya- **For** Dr Jyoti Bali- **Against**	Dr Puneeta Mahajan Dr Rita Ranjan Dr Ratna Biswas
	Ovarian drilling for PCOS-Should it be done	Dr Garima Kachhawa- **For** Dr Tanya Rohtagi-**Against**	
	NIPT- Is it relevant in current scenario	Dr Chanchal Singh-**For** Dr Sarita Singh-**Against**	

List of Prizes - AOGD Conference 2015

Dr S N Mukherjee- Roating Trophy	Best Clinical Presentation
Research paper- Best Competition Paper	3 Medals, Gold, Silver, Bronze
Dr Batra's Medal- Winning team of AOGD quiz	1 Gold Medal
Dr Neera Agarwal Medal- Best Paper on theme topic obstetrics	2 Medals, Gold, Silver
Dr Neelam Bala Vaid's Medal- Best paper on theme topic gynecology	2 Medals, Gold, Silver
Mr S Bhattacharya & Dr Ganguly Medal- Free Paper competition- Mescellaneous Category	2 Medals, Gold, Silver
Poster Presentation	2 Medals, Gold, Silver
Slogan Competition	First Prize, Second Prize
Dr Suneeta Mittal- Population Stabilization	1 Gold Medal
Dr U P Jha & Dewan Balakram- Best Presentation in Gynae Oncology	1 Gold Medal
Dr U P Jha & Raj Soni- Best Oral/Video/Paper Presentation in Endoscopy	1 Gold Medal

37th Annual Conference of Association of Obstetricians and Gynaecologists of Delhi

Theme:
"Preventive Health & Critical Care in Obstetrics & Gynaecology"

Conference: 31st Oct., 2015 - 1st Nov., 2015 **Venue:** India Habitat Center, Lodhi Road, New Delhi

Registration Detail

(From may be photocopied. Kindly fill in Capital Letters)

Full Name: ..... Qualification: .....

Specialty ..... Category: ☐ Delegate ☐ PG Student ☐ Faculty

Organization: ..... Designation .....

Address: .....

Pin Code:..... Mobile No.: ..... Email ID: .....

Registration Fee

Dates	Conference			Workshop		
	Members	PG Students	Non-members	Members	PG Students	Non-members
Up to 15 October, 2015	₹ 4000	₹ 3500	₹ 4800	₹ 1800	₹ 1600	₹ 2000
Spot	₹ 4500	₹ 4000	₹ 5300	₹ 2100	₹ 1900	₹ 2300

- All cheques/bank draft payable at New Delhi & should be made in favour of "AOGD Annual Conference 2015"
- Post Graduates have to attach a certificate from HOD and also be an associate member of the AOGD in order to attend and present a paper.
- It is mandatory to register for the conference in order to attend & register for any workshop.
- You may register for more than one workshop.

Date	**Workshop**	**Venue**	✓
28th Oct., 2015	Oncology	Sir Gangaram Hospital, New Delhi	☐
28th Oct., 2015	Reproductive Endocrinology and Infertility	Wood Apple Residency Vikas Marg, New Delhi	☐
29th Oct., 2015	Fetal Medicine	Apollo Hospital, Sarita Vihar, New Delhi	☐
29th Oct., 2015	Endoscopy	Fortis Hospital, Vasant Kunj, New Delhi	☐
30th Oct., 2015	Endometriosis	Fortis Hospital, Vasant Kunj, New Delhi	☐
2nd Nov., 2015	Urogynaecology and Vaginal Surgery	VMMC & Safdarjung Hospital, New Delhi	☐
2nd Nov., 2015	Medico legal aspect "Mother & Child"	ESI Hospital, Basai Darapur, New Delhi	☐

Payment details:

Bank draft/cheque no..... Bank .....

Branch ..... Total amount .....

CONFERENCE SECRETARIAT

Ward-8, Room No.-118 Department of Obst & Gynae, VMMC & Safdarjung Hospital, New Delhi-110 029
Phone No: 011-26181879, 26714473; Email: aogdsjh2015@gmail.com

SOCIETY OF FETAL MEDICINE

Regd. Office: C584, Defence Colony, New Delhi-110024

Forthcoming Meetings

- **5-6th September, 2015**: Medicolegal & Ultrasound Workshop (First Trimester and Beyond) in association of Bangalore Society of Obstetrics and Gynecology (BSOG), Bengaluru.
  Contact: Dr. Prathima Radhakrishnan, Phone: +91 9035173865/ 9742875424 email: prathimabfmc@hotmail.com
- **27th September, 2015**: Inaugural CME of the Patiala SFM Chapter, Patiala, Punjab.
  Contact: Dr. Chander Mohini. Phone: +91 9814087891, email: chandermohini15@gmail.com
- **25th October, 2015:** Fetal Day CME, Jabalpur, Madhya Pradesh.
  Contact: Dr. D'Pankar Banerji. Phone: +91 9826166952, email: dpankar@idealfertility.com
- **31st October- 1st November, 2015:** Rainbow Fetus Day and Society of Fetal Medicine Mid-term CME, Hyderabad, Andhra Pradesh.
  Contact: Dr. Chinmayee Ratha. Phone: +91 9885348600, email: chinmayee3@gmail.com
- **12-13th December, 2015:** Fetal Heart 2, Amrita Institute of Medical Sciences, Kochi. Kerala covering Fetal Heart Imaging from 2D to 4D STIC with a STIC workshop and Therapeutics Focussing on Comprehensive Care of a Fetus with Heart Disease
  Contact: Dr Balu Vaidyanathan. Phone: +91 9495820684, email: baluvaidyanathan@gmail.com

For Society of Fetal Medicine membership, kindly contact Vishal Mittal at +919312227181 or send an email at secretariat@societyoffetalmedicine.com.

37th Annual Conference of Association of Obstetricians & Gynaecologists of Delhi

Theme: ***"Preventive Health & Critical Care in Obstetrics & Gynaecology"***

Conference: 31st October, 2015 - 1st November, 2015 **Venue:** India Habitat Center, Lodhi Road, New Delhi

Pre & Post Conference Workshops

Gynaecologic Oncology Procedures: Peritoneal surface malignancies, HIPEC & Robotic Surgeries

(Organised by AOGD Oncology Committee & Sir Ganga Ram Hospital)

Organizing Chairperson
Dr Harsha Khullar, Dr Shalini Rajaram
(Chairperson, AOGD Oncology Subcommittee)

Organizing Secretary
Dr Mala Srivastava

Date: **28th October, 2015** *Venue:* **Auditorium, Sir Ganga Ram Hospital, New Delhi**

Time	Video Workshop	Speaker	Chairperson
07:30-08:00	**Registration**		
08:00-08:05	**Welcome Address Dr Indrani Ganguli, HOD, Obst & Gynae, SGRH**		
08:05-08:10	**Introduction Dr Shalini Rajaram, Chairperson, AOGD Oncology Subcommittee**		
08:10-08:30	Pelvic Anatomy	Dr Neerja Bhatla	Dr S K Bhandari / Dr Shalini Rajaram
08:30-08:50	Radical Hysterectomy with Pelvic lymphadenectomy	Dr Kavita Singh (UK)	Dr Vijay Zutsi / Dr Rupinder Sekhon
08:50-09:10	Techniques of Extraperitoneal Peritonectomy & Diaphragmatic stripping & Technique of total omentectomy	Dr Somasekhar SP (Bengaluru)	Dr Geeta M / Dr Sabhyata / Dr Sarita Shamsunder
09:10-10:30	**Video Workshop Ca Endometrium - Robotic (OT1)** Robotic surgery for endometrial cancer: Type I extrafascial hysterectomy with pelvic and paraaortic lymphadenectomy	Dr Somasekhar SP (Bengaluru)	Moderators Dr I Ganguli / Dr Mamta Dagar / Dr Amita Suneja
10:30-11:00	**Inauguration & Tea**		
11:00-15:00	**Video Workshop (OT1)** 1. Laparoscopic radical hysterectomy Type III with pelvic lyphadenectomy 2. Laparoscopic Radical Trachelectomy	 Dr Kavita Singh (UK) Dr Kavita Singh (UK)	**Moderators** Dr Roma Joshi Dr K Gujral Dr Harsha Khullar Dr Nalini Mahajan
	Video Workshop (OT2) **Stage III Ovarian cancer:** Total Peritonectomy, Diaphragmatic stripping, Total Omentectomy, Pelvic and Paraortic lymphadenectomy, Retrograde hysterectomy, Anterior resection of rectum & end-to-end anastomosis	Dr Somasekhar SP	Dr Kanika Gupta / Dr Gauri Gandhi / Dr Sumita Mehta
15:00-16:00	HIPEC - Recent advances & current concepts in HIPEC - Steps of HIPEC - HIPEC demonstration		Dr Mala Srivastava / Dr Chandra Mansukhani

For Registration, Contact:
Dr Mala Srivastava, M. 9811228336, e-mail: malasrivastava2001@yahoo.co.in

Trouble Shooting - Infertility Management

(Organised by Infertility & Reproductive Endocrinology Subcommittee)

Organizing Chairpersons: Dr Kuldeep Jain, Dr Susheela Gupta

Date: **28th October, 2015** *Venue:* **Wood Apple Residency, Vikas Marg, Delhi**

Time	Session	Speaker
09:30 - 09:40 hrs	**Welcome Address**	Dr Kuldeep Jain
Session I	**Trouble Shooting - Ovulation Induction** **Chair Persons: Dr Neera Agrawal, Dr Poonam Gupta, Dr Garima Kapoor**	

09:40 - 10:00 hrs	How to trouble shoot- in Clomiphene cycles	Dr nutan Aggarwal
10:05 - 10:25 hrs	How to trouble shoot- in PCOS	Dr KD Nayyar
10:30 - 10:50 hrs	How to prevent OHSS	Dr Susheela Gupta
10:55 - 11:15 hrs	How to trouble shoot- in poor responders	Dr Sonia Malik
11:20 - 11:40 hrs	**Tea Break**	
Session II	**Trouble shoot - Poor responder during IVF/ET** **Chair persons: Dr Leena Wadhwa, Dr Rashmi Sharma, Dr Renu Malik**	
11:40 - 12:00 hrs	Repeated failure of Ovulation trigger	Dr Sudha Prasad
12:05 - 12:25 hrs	Poor endometrium in donor/ frozen cycles	Dr Sohani Verma
Session III	**Trouble shoot - Lap Hysteroscopy and USG** **Chair persons: Dr Sushma Sinha, Dr Renu Chawla, Dr Suneeta Fotedar**	
12:30 - 12:50 hrs	Laparoscopy	Dr Alka Kriplani
12:55 - 13:15 hrs	Hysteroscopy	Dr S Mohan
13:20 - 13:40 hrs	Trouble shooting- Imaging during IVF & IUI cycles	Dr Bharti Jain
13:40 - 14:20 hrs	**Lunch Break**	
Session IV	**Trouble shoot - IVF Procedures** **Chair persons: Dr Neeta singh, Dr Ila Gupta, Dr Nirupama Goyal**	
14:20 - 14:40 hrs	OPU	Dr kuldeep Jain
14:45 - 15:05 hrs	Embryo Transfer	Dr Narendra Malhotra
Session V	**Trouble shooting - Embryology** **Chair persons: Dr Ritu Jain, Dr Surveen Ghumman**	
15:10 - 15:30 hrs	Semen Preparation	Dr Pankaj Talwar
15:35 - 15:55 hrs	Lab maintenance / quality control	
16:00 - 16:20 hrs	ICSI	Dr Jaideep Malhotra
16:25 - 16:45 hrs	Vitrification	Dr Gaurav Majumdar
16:45 - 16:50 hrs	**Vote of Thanks**	

For Registration, Contact:
Dr Kuldeep Jain, M. 9810018951, e-mail: drjain@kjivf.com
Dr Susheela Gupta, M. 9312234911, e-mail: drsusheelagupta@gmail.com

Current Standard of Care in Fetal Medicine

(Organised by the Fetal Medicine & Genetics Subcommittee, AOGD 2015-2016)

Conveners: Dr Chanchal, Dr Seema Thakur, Dr Anita Kaul

Date: **29th October, 2015** *Venue:* **Indraprastha Apollo Hospital, Sarita Vihar, New Delhi**

08:30 - 09:00	**Registration**	
	Session I: Ultrasound screening for abnormalities - Current recommendations	
09:00 - 09:05	Introduction	Dr Anita Kaul
09:05 - 09:15	Aneuploidy screening in first trimester	Dr Chanchal
09:15 - 09:30	Early anomaly check 1st trim - what must not be missed	Dr Ashok Khurana
09:30 - 09:40	How to get FMF certification for NT scan	Dr Rachna Gupta
	Session II: Soft markers to invasive testing and everything in between!	
09:40 - 10:00	Soft markers -from reporting to patient counselling	Dr Poonam Tara
10:00 - 10:30	**Tea break**	
10:30 - 11:30	Live demonstration	Dr Ashok Khurana Dr Chanchal
	• NT/NB/DV/TR	
	• early anomaly check	
	• uterine artery Doppler	
11:30 - 11:45	Genetic syndromes in obstetric practice	Dr Seema Thakur
11:45 - 12:00	Invasive testing - when and how?	Dr Vandana Chadha

12:00 - 13:15	Live demonstration	
	• Anomaly scan including extended cardiac views	Dr Ashutosh Gupta
	• Amniocentesis, CVS (as per availability)	Dr Anita Kaul
13:15 - 13:30	QNatal Advanced, Noninvasive Prenatal Screening (NIPS)	Dr Ashish Fauzdar
13:30 - 14:00	**Lunch**	
	Session III: Fetal Dopplers in third trimester	
14:00 - 14:15	Role of Dopplers in management of IUGR	Dr Sangeeta Gupta
14:15 - 14:45	Live demonstration: Dopplers	Dr Nandita Dimri
	• Umbilical artery	
	• MCA	
	• DV	
	Session IV: From diagnosis to treatment: Current status of fetal therapy	
14:45 - 15:00	Fetal Surgery -an overview	Dr Deepika Deka
	Session V: OSCE stations and Simulation	
	Faculty: Dr Aparna Sharma, Dr Chanchal, Dr Manisha, Dr Poonam Tara, Dr Rachna Gupta, Dr Neha Gupta	
15:00 - 16:45	Objective and Subjective Clinical Evaluation styled stations	
	• Hands on experience on simulators - Anomaly scan	
	• Hands on experience on simulators - Invasive procedures	
	• CTG case based interpretation and discussion	
	• Fetal anomaly and counselling	
	• High risk pregnancy, ultrasound findings and counselling	
16:45 - 17:00	**Feedback and Discussion**	

For Registration, Contact:
Dr Chanchal, M. 9899092076, e-mail: chanchalsingh@gmail.com
Dr Seema, M. 9818387430, e-mail: seematranjan@gmail.com

Master Class Workshop in Challenges and Complications in Laparoscopy & Hysteroscopy

Certified by AICC RCOG; Credit points applied for DMC

Organizing Chairperson
Dr UP Jha

Organizing Secretary
Dr Neema Sharma, Dr Ramandeep

Masters
Dr Rakesh Sinha, Dr UP Jha

Date: **29th October 2015** *Venue:* **India Habitat Centre**

Time	Video Workshop	Chairpersons
09:00 - 11:00	**Hysterectomy Session**	
	Challenges & Complications in Total Laparoscopic Hysterectomy Unedited videos addressing challenges and technique in TLH (Large uterus, multiple previous surgeries, coexisting endometriosis)	Dr Sanjivni Khanna, Dr Anjila Aneja Dr Manvita, Dr Puneeta Bhardwaj Dr AG Radhika
11:00 - 13:00	**Myomectomy Session**	
	Challenges and Complications in Myomectomy Unedited videos addressing challenges and technique in Myomectomy (Cervical, Broad ligament, multiple and large fibroids)	Dr Malvika Sabharwal Dr Jyoti Mishra, Dr Arbinder Dang Dr Sonia Naik, Dr Sharda Patra
13:30 - 15:30	**Ovarian Cystectomy Session**	
	Challenges & Complications in Ovarian cyst & endometrioma Videos addressing challenges and technique in Ovarian cyst (Surgery for infertility, for menorrhagia, for pelvic pain)	Dr Veena Bhatt, Dr Dinesh Kansal Dr Neena Behl, Dr Devender Dr Pooja Thukral
15:30 - 16:30	**Hysteroscopy Session**	
	Challenges and Complications in Hysteroscopy Videos addressing challenges and technique in operative Hysteroscopy	Dr Mala Srivastava, Dr Usha M Kumar Dr Neena Singh, Dr Shivani Sabharwal Dr Nivedita, Dr Jasmine

For Registration, Contact: Dr Neema Sharma, M. 9911057456, e-mail: drneemasharma@yahoo.com

Enhancing Your Patient Outcome in Endometriosis

under aegis of FOGSI Endometriosis Committee; Organised by Endometriosis Committee of AOGD

Certified by AICC RCOG; Credit points applied for IMC, DMC, ICOG

Facilitators: Dr Ramandeep Kaur, Dr Neema Sharma

Faculty: Dr Urvashi Jha, Dr P Das Mahapatra, Dr Ramani Devi, Dr Alka Kriplani, Dr Neerja Bhatla, Dr Sonia Malik, Dr Nalini Mahajan, Dr Sudha Prasad, Dr Sohani Verma, Dr Reva Tripathi, Dr Jyoti Mishra, Dr Punita Bhardwaj, Dr Leena Wadhwa, Dr Sweta Mittal, Dr Garima Kachwaha, Dr Alka Gujral, Dr Kuldeep Jain

Date: **30th October 2015** *Venue:* **Magnolia Hall, India Habitat Centre, Lodhi Road, New Delhi**
(Entry from gate number 3 on Vardhman Marg)

Time	Topic
08:30 - onwards	Registration
08:50	Inauguration
09:00 - 09:20	Never miss the diagnosis of endometriosis .
09:20 - 09:40	Medical management options- Getting more pain relief in patients with endometriosis and to improve infertility
09:40 - 11:10	**Video session to teach optimising surgery in endometriosis** Lap surgery for endometrioma Surgery for pelvic pain in endometriosis Laparoscopic management of ruptured endometrioma presenting as acute abdmen Surgery in endometriosis with infertility Laparoscopy in deep infilterating endometriosis Laparoscopic management for rectovaginal endometriosis Laparoscopic ureteral dissection in endometriosis
11:10 - 11:30	**Tea Break**
11:30 - 11:50	Should we treat asymptomatic endometriosis
11:50 - 12:00	Fertility preservation in endometriosis
12:00 - 12:15	How to deal with menopausal issues after endometriosis surgery & role of HRT
12:20 - 12:40	How to get best results for your adolescent patient
12:40 - 13:00	Association between endometriosis and malignancy
13:00 - 14:00	Panel discussion: Improving infertility outcomes in endometriosis
14:00 - onward	**Lunch**

For Registration, Contact: Dr Ramandeep Kaur, M. 9968604341, e-mail: dr.ramandeep@ymail.com

Urogynaecology & Vaginal Surgery

Organized by AOGD Urogynaecology Subcommittee and VMMC & Safdarjung Hospital

Organizing Chairperson
Dr Pratima Mittal, Dr Ranjana Sharma

Organizing Secretary
Dr Renu Arora, Dr Achla Batra

Date: **2nd November, 2015** *Venue:* **Old Lecture Theatre, Behind OPD Block**

Time	Video Workshop	Moderator	Speaker	Chairperson
08:30 - 09:00	**Registration**			
09:00 - 09:10	Welcome - Dr Pratima Mittal			
09:10 - 09:45	Management Decision in Incontinence	Dr Aruna		
	1.POPQ Classification		Dr Karishma Thariani	Dr Aparna Hegde
	2. Choice of surgery for Incontinence		Dr Amita Jain	Dr Anoop Gupta
	3.Biofeedback & Pesseries		Dr Achla Batra	
09:45 - 11:00	Surgical treatment of Incontinence			
	1.Urodynamic assessment of incontinence	Dr Pratima Mittal	Dr Ranjana Sharma	Dr Geeta Mediratta
	2.TVT		Dr Monika Gupta	Dr Sunita Fotedar
	3.TOT		Dr Pawan Vashudev	
	4. Miniarch			
	5 Burch colposuspension		Dr J B Sharma	
11:00 - 11:30	**Inaugration & Tea**			

11:30 - 13:00	Vaginal Vault Suspension procedures			
	1. Mc Call's procedure	Dr Achla Batra	Dr A K Jain	Dr Kamal Buckshee
	2. High uterosacral suspension		Dr H P Anand	Dr Sunita Malik
	3. Sacrospinous suspension		Dr Vijay Zutshi	
13:00 - 14:00	**Lunch**			
14:00 - 15:00	Colpocleisis			
	1. Uterine Conserving	Dr Ranjana Sharma	Dr Renu Arora	Dr Raj Bokaria
	2. Post Hysterectomy		Dr Rekha Bharti	Dr Banashree Das

For Registration Log on to -www.aogd.org
Contact Person: Dr Renu Arora, 09971103615, Email Id:- renuarora2010@yahoo.co.in

Medico Legal Aspects of Maternal & Child Health

Organizing Chairperson
Dr Sangeeta Gupta

Organizing Secretary
Dr Taru Gupta

Organizing Jt Secretary
Dr Leena Wadhwa, Dr Pratiksha Gupta
Dr Nupur Gupta

Date: **2nd Nov. 2015, 09:00am - 04:00pm**

Venue: **Silver Jubilee Auditorium**
ESI- PGIMSR Basaidarapur, New Delhi

09:00 - 09:30	Registration		
Time	**Session I** **Modern Obstetrics & Law**	**Chairpersons:** Dr Madhavi Mathur Dr Sarvesh Tandon	**Speakers**
09:30 - 09:45	Fetal Monitoring		Dr Taru Gupta
09:45 - 10:00	Mode of Delivery		Dr Leena Wadhwa
10:00 - 10:15	Birth Asphyxia, Injuries & LAW		Dr Suresh Gupta Ganga Ram Hospital
10:15 - 10:30	MTP Act - Interpretation & Implications		Dr Pratiksha Gupta
10:30 - 11:00	**Session II - Drill**	**Death on Table-Doctors Role & Responsibility**	Dr Sangeeta Gupta Dr Nupur Gupta
	Session III **Why do Doctors get sued?**	**Chairpersons:** Dr Abha Singh, Dr Pushpa Singh	
11:00 - 11:20	Consent		Dr Sarvesh Tandon
11:20 - 11:40	Medical Documents		Dr Hitesh Bhatt
11:40 - 12:00	Criminal Negligence		Dr R K Sharma (Delhi)
12:00 - 12:20	Defenses available to a Doctor in Medicolegal Cases		Dr Hitesh Bhatt
12:20 - 12:40	How to Deal with Mob and Police		Dr Charu Rawat Mittal (Gwalior)
12:40 - 13:00	Received Legal Notice: What Is Next?		Dr Geetendra Sharma
13:00 - 13:30	**Inauguration**		
13:30 - 14:15	**Lunch**		
14:15 - 14:30	Do's and Don't s of PNDT ACT		Dr Pratima Mittal
14:30 - 15:30	**Session IV** **Panel**	**Moderator:** Dr Hitesh Bhatt **Medicolegal Issues:** From Clinic To Court Room	**Panelist** Dr R K Sharma Dr Geetendra Sharma Dr Sushil Gupta Dr M C Gupta Prof Anjali Tempe (MAMC) Dr Jyoti Bagla
15:30-15:45	Audience Interaction		
15:45-16:00	Valedictory		

For Registration, Contact: Dr Taru Gupta, M. 9560321212, e-mail: tarugupta1971@yahoo.com
Registration Fees 1500/ Rs for Workshop, Details available in Brochure of AOGD 2015 Conference.

CLINICAL UPDATE

Sudden Post Partum Collapse

K Usha Rani[1], Ruchi Hooda[2], Anita Paswan[3], Kashika[4]

[1]Senior Specialist, [2]Postgraduate President, [3,4]Senior Resident, Department of Obs & Gynae, VMMC & Safdarjung Hospital, New Delhi

Sudden postpartum collapse is an acute emergency which may be a result of severe catastrophic events following labour. There are many causes of collapse, and these may be pregnancy-related or result from conditions not related to pregnancy and possibly existing before pregnancy which are acutely exacerbated due to pregnancy and by the process of labour[1]. For the purpose of this article it is proposed to limit discussion to those cases in which sudden collapse of the mother occurs within a few minutes or hours after delivery. Rapid diagnosis and immediate resuscitative measure are essential to save the life of the patient. It is of vital importance that the health care providers are skilled in initial effective resuscitation techniques and are able to investigate and diagnose the cause of collapse to allow appropriate management.

Important causes of postpartum collapse[1, 2, 3]

1) Massive postpartum hemorrhage
2) Acute uterine inversion
3) Embolism
   a. Amniotic fluid embolism
   b. Pulmonary embolism
4) Toxemia of pregnancy
5) Causes related to anaesthesia
   a. Anaesthetic toxicity
   b. Mendelson's Syndrome
6) Cardiac causes
   a. Peripartum cardiomyopathy
   b. Severe anaemia with CCF
   c. Heart disease with CCF
7) Intracranial hemorrhage
   a. Spontaneous subarachnoid hemorrhage
   b. Preeclampsia-eclampsia associated intracerebral hemorrhage
8) Miscellaneous
   a. Septic shock
   b. Anaphylactic shock
   c. Acute adrenocortical insufficiency (Addisonian crisis)

The specifics of all causes of postpartum collapse are outside the scope of this article; however, key points of the most important causes of maternal collapse are detailed below.

Broadly the causes of post partum collapse can be remembered by the 4 H's:

Hypovolaemia: Bleeding (may be concealed) (obstetric/ other) or relative hypovolaemia of dense spinal block; septic or neurogenic shock

Hypoxia: Pregnant patients can become hypoxic more quickly; Cardiac events: peripartum cardiomyopathy, myocardial infarction, aortic dissection, large-vessel aneurysms; Pulmonary & Amniotic fluid embolism.

Hypo/ hyperkalaemia and other electrolyte disturbances: no more likely than in general population.

Hypothermia: No more likely than in general population.

Massive postpartum hemorrhage[4]

The most common cause of postpartum shock is massive postpartum hemorrhage.

Etiology: Revealed PPH may be due to uterine atony, genital tract trauma and retained placental tissue. Concealed hemorrhage may occur due to haematoma formation in the broad ligament or the vaginal wall. Coagulopathy is rarely a primary cause of PPH but is usually seen as part of amniotic fluid embolism or secondary to initial hemorrhage.

Risk factors: Grand multiparity; caesarean section and instrumental vaginal delivery; prolonged and obstructed labour; prolonged syntocinon use; antepartum hemorrhage; previous PPH; uterine over distension (e.g. multiple pregnancies, polyhydramnios, severe macrosomia); and a low-lying placenta.

Tachycardia develops initially and without fluid resuscitation, hypotension will follow. The urine output falls and this may be an early sign, especially in a postoperative woman with ongoing intravenous fluid replacement. If untreated or rapid, hemorrhage can result in confusion and reduced consciousness due to cerebral hypoperfusion. High flow oxygen and aggressive fluid resuscitation should be done (with blood as soon as possible), simultaneous with interventions to stop bleeding. A head down tilt or leg elevation will reduce cerebral hypoperfusion. The major obstetric haemorrhage protocol should be activated (refer to flow chart on management of PPH).

Acute uterine inversion

It is more common in primipara and may recur in subsequent pregnancies**.**

Etiology: It is mostly related to mismanagement of third stage of labour. Predisposing factors for inversion are fundal implantation of placenta, adherent placenta and uterine atony.

Shock and hemorrhage are immediate. The degree of cardiovascular collapse is out of proportion to the hemorrhage and has been attributed to stretching of nerves or pressure on the ovaries.

Management: Repostioning of the uterus should be done immediately as with passage of time constriction ring around the uterus becomes more rigid and gets engorged due to venous stasis, making repositioning more difficult. It should be attempted without anesthesia if immediate facility for anesthesia is not available.

The methods of replacement of inverted uterus are as follows.

Manual replacement

Under anaesthesia, one hand is placed in the vagina with fingertips at the uterocervical junction and fundus in the palm of hand. The uterus is then pushed up through the cervix in the direction of umbilicus to its normal position and using the other hand to stabilise the uterus. The hand should be maintained in the position while oxytocics are administered and until the tone is regained.

If the placenta is not separated, manual replacement should precede removal. If manual re position fails then next step is hydrostatic correction.

Hydrostatic Replacement (O'Sullivan)

A douche container containing normal saline is placed 2 feet above the patient and nozzle introduced into the vagina while introitus is blocked. The stretching of the vaginal fornices and gradual pushing up of inverted fundus corrects the inversion.

Operative Replacement

It may be required (Huntington's and Haultain's opertaion) when immediate replacement has failed or the cervical constriction ring is associated with an oedematous uterus.

1. Abdominal procedures
   - Huntington's procedure: involves pulling on the round ligaments gradually to restore the uterine position.
   - Haultain's procedure: involves incising the cervical ring posteriorly and then repositing the uterus.
   - Ocejo procedure: involves incising the cervical ring anteriorly.
2. Vaginal procedures:
   - Spinelli: the cervical ring and the lower part of uterus are divided anteriorly and the inversion is replaced.
   - Kustner: involves division of the cervical ring posteriorly.

Amniotic fluid embolism

It is the most devastating condition known in obstetrics with a maternal mortality of about 80%.

Etiology: Anaphylactic type of reaction to fetal skin squamous cells and amniotic fluid entering the maternal circulation during labour and delivery with intense pulmonary vasoconstriction and transient rise in pulmonary artery pressure.

Risk factors: Vigorous labour, oxytocin infusion, meconium stained liquor, amniocentesis placental abruption, uterine rupture**,** cervical laceration, caesarean section**,** operative vaginal delivery.

Clinical features: The classical presentation is sudden dyspnoea and hypotension often followed within minutes by cardiorespiratory arrest. Rapid onset of coagulopathy results in bleeding causing massive PPH.

Diagnosis: It is based on clinical presentation and supportive laboratory studies. Demonstration of amniotic fluid debris in blood obtained via a central venous or pulmonary artery balloon floation catheter supports the diagnosis. Elevated pulmonary artery and central venous pressure can be demonstrated immediately after embolism.

Management: High flow oxygen and aggressive resuscitation are required. Central haemodynamic monitoring should be used to guide fluid replacement. Ventilation, inotropic support and administration of fresh frozen plasma, cryoprecipitate and platelets will be required. Hysterectomy is rarely required to control PPH.

Pulmonary embolism

Etiology: Deep leg and pelvic vein thrombosis result in pulmonary embolism. Risk factors: Include BMI >30, immobility including prolonged hospitalization, delivery by Caesarean section or other surgery unrelated to pregnancy, severe pre-eclampsia, higher maternal age, previous personal or family history of venous thromboembolism (VTE), history of thrombophilia, air travel and assisted conception.

Key clinical and investigation findings: Sudden onset of shortness of breath with fall in oxygen saturation at rest or on any exertion. A deep vein thrombosis may exist (with unilateral leg swelling or tenderness) but there may be no evidence as the clot may be in the femoral or iliac veins. Chest pain may also occur but haemoptysis is rarely seen.

Key treatment points in definitive management: High flow oxygen and aggressive fluid resuscitation is indicated if the clinical suspicion of VTE exists. Therapeutic dose heparin (1 mg/kg bid enoxaparin) must be commenced

until investigations to exclude the diagnosis have taken place. Except in rare cases, bleeding in a postoperative woman can be managed and thus, the risk related to VTE significantly outweighs the risk of bleeding.

Pre-eclampsia and eclampsia

A tonic-clonic convulsion in the absence of a history of epilepsy should be assumed to be eclampsia until proven otherwise. The reflexes will be brisk, clonus may be elicited and there is often severe hypertension. Loss of consciousness in a woman with hypertension may be due to respiratory failure (pulmonary edema usually preceded by shortness of breath and falling oxygen saturation) or due to a cerebral event (presenting with focal neurological signs, brisk reflexes and severe hypertension).

Key treatment points in definitive management: The airway should be protected by the use of the left lateral position and suction if necessary. A bolus dose of magnesium sulphate should be given to all women when an eclamptic fit is suspected and should be considered in women with severe pre eclampsia as prophylaxis. Oxygen should be administered. The blood pressure should be lowered as soon as possible using an intravenous agent.

Further investigations should be considered urgently to establish if other systems are involved in the process (e.g. thrombocytopenia or liver and kidney function abnormality). Brain imaging is required in the case of repeated fits or focal neurological signs suggesting possible intracranial pathology.

Sepsis

Etiology: Infections are most commonly due to beta-haemolytic Streptococcus, Lancefield group A (occasionally Group B) Streptococcus, E. coli, Pseudomonas, Staphylococcus aureus, Proteus and Listeria.

Risk factors: Include obesity, impaired glucose tolerance, impaired immunity including human immunodeficiency virus (HIV) infection, anaemia, prolonged spontaneous rupture of membranes, caesarean section, vaginal trauma, retained products and wound haematoma.

Key clinical and investigation findings: Tachycardia and pyrexia will occur early in the septic process with hypotension developing as the disease process becomes more advanced. There may be uterine tenderness but postpartum women may develop septicaemia secondary to chest infections or other usually 'benign' local infections. As septic shock develops, the urine output falls and the bloods will show a very high or an unusually low white cell count. This may be complicated with hepatic and renal dysfunction and in more advanced cases by profound metabolic acidosis. Serum lactate, blood gases and blood cultures must be measured in suspected systemic sepsis.

Key treatment points in definitive management: High flow oxygen and aggressive fluid resuscitation are essential with targeted appropriate high-dose intravenous antibiotics. Inotropic support and ventilation may be required.

Anaphylaxis

Anaphylaxis is a severe, life-threatening generalized or systemic hypersensitivity reaction resulting in respiratory, cutaneous and circulatory changes and, possibly gastrointestinal disturbance and collapse. There is significant intravascular volume redistribution, which can lead to decreased cardiac output. Acute ventricular failure and myocardial ischaemia may occur. Upper airway occlusion secondary to angioedema, bronchospasm and mucous plugging of smaller airways all contribute to significant hypoxia and difficulties with ventilation. Common triggers are a variety of drugs, latex, animal allergens and foods.

Anaphylaxis is likely when all of the following three criteria are met:

- Sudden onset and rapid progression of symptoms
- Life-threatening airway and/or breathing and/or circulation problems
- Skin and/or mucosal changes (flushing, urticaria, angioedema).

Exposure to a known allergen for the woman supports the diagnosis, but many cases occur with no previous history. Mast cell tryptase levels can be useful.

Conclusion

It is important to take a comprehensive history at booking or at the first contact with the patient to identify risk factors that might warrant a specialist or obstetrician's review**.** Early identification of risk factors and multidisciplinary involvement, with effective communication and clear documentation of management plans for labour and the postnatal period can help prevent poor outcome.

References

1. Maternal collapse in pregnancy and puerperium. RCOG guidelines no-56, Jan 2011,2-24
2. S Nanda, L K Peena. Postpartum collapse. Obstetrics Gynaecology and Reproductive Medicine, 2009; 221-28
3. P Satoskar. Sudden postpartum collapse. Pregnancy at Risk Current Conceptus, 2011, 462-67
4. Postpartum haemorrhage. ACOG Practice Bulletin, vol 108, no-4, Oct 2006

Birth Asphyxia – An Obstetrician's Perspective

Sangeeta Gupta[1], Taru Gupta[2], Shweta Singh[3]
[1]Senior Consultant & HOD, [2]Associate Professor, [3]Senior Resident, Department of Obstetrics & Gynaecology, ESI PIMSR Basaidarapur, New Delhi

Despite a much improved obstetric care in the current era, obstetric litigation is a growing problem which poses serious concerns to the maternity service providers. The main contributor to litigation relates to foetal surveillance in labour and its outcome. According to WHO, 4 million deaths occur yearly due to birth asphyxia, representing 38% of all deaths of children under 5 years of age. In low-income countries, 23% of all neonatal deaths occur due to birth asphyxia[1] and it is also one of the leading causes of neonatal deaths within first week of life[2]. It is strongly associated with 1.1 million intrapartum stillbirths and is responsible for long-term neurological disability and impairment[3]. Hence, understanding birth asphyxia as an obstetrician will help us to prevent neonatal morbidity and mortality. Our vigilance can decrease the litigations related to fetal outcome.

Definition

American College of Obstetricians and Gynaecologists and the American Academy of Paediatrics, label a neonate as asphyxiated if the following conditions are met:

1. Umbilical cord arterial pH < 7;
2. Apgar score of 0 to 3 for longer than 5 minutes;
3. Neurological manifestations (e.g. seizures, coma, or hypotonia);
4. Multisystem organ dysfunction, e.g., cardiovascular, gastrointestinal, haematological, pulmonary, or renal system.[4]

According to ***WHO classification*** of diseases ICD 10,

- Severe birth asphyxia is when[1]
  - o Pulse less than 100 per minute at birth and falling or steady,
  - o Absent or gasping respiration,
  - o Poor colour,
  - o Absent tone
  - o Apgar score 0-3 at 1 minute.
- Mild and moderate birth asphyxia is when Apgar score at 1 min is 4-7[5].

Establishment of causation and liability is the crucial step for successful legal action. The following list of essential and additional criteria has been proposed to help to determine whether birth asphyxia can be considered as causative agent.

Essential criteria (must meet all four-MacLennan 1999)

1. Evidence of a metabolic acidosis in fetal umbilical cord arterial blood obtained at birth (pH <7.0 and base deficit >12 mmol/L)
2. Early onset of severe or moderate neonatal encephalopathy in infants born at 34 or more weeks gestation
3. Cerebral palsy of the spastic quadriplegic or dyskinetic type
4. Exclusion of other identifiable aetiologies, such as trauma, coagulation disorders, infectious conditions, or genetic disorders.

Additional criteria *(that collectively suggest intrapartum timing with close proximity to labor and delivery, e.g. 0-48hours; but are nonspecific to asphyxia insults)*

1. A sentinel hypoxic event occurring immediately before or during labor.
2. A sudden and sustained fetal bradycardia; the absence of fetal heart rate variability; the presence of persistent, late, or variable decelerations, usually after a hypoxic sentinel event when the pattern was previously normal.
3. Apgar scores of 0-3 beyond 5 minutes.
4. Onset of multisystem involvement within 72 hours of birth.
5. Early imaging study showing evidence of acute non focal cerebral abnormality.

Pathophysiology

Birth asphyxia is an insult to the fetus or new-born leading to decreased oxygen perfusion to various organs. Asphyxia is a condition that occurs when there is an impairment of blood-gas exchange, resulting in hypoxemia (lack of oxygen in blood) and hypercapnia (accumulation of carbon dioxide) leading to hypoxia (decrease in oxygen supply to the tissue secondary to continuing hypoxemia) and metabolic acidosis. With hypoxia, there is release of catecholamines which leads to increase cardiac output by raising heart rate, but if it is sustained then it leads to a cascade of biochemical changes inside the body, which lead to neuronal cell death and brain damage. This state of hypoxia and metabolic acidosis results in asphyxia and is the final step before cellular and organ failure. The time needed to build up hypoxia and acidosis will vary from fetus to

fetus depending on its "physiological reserve" and also on the extent to which the blood supply to and from placenta is disrupted. Continuous asphyxia will also lead to multiple organ systems dysfunction.

Etiology

Birth asphyxia can be due to maternal or fetal factors (Table 1).

Diagnosis and management

Only about half of the infants needing resuscitation are predicted by antenatal history or signs during labour.

Predictors of low Apgar scores[6]

1. Fetal movement counting (typical sensitivity 12 to 50%, specificity 91 to 97%);
2. Non-stress testing (typical sensitivity 14 to 59%, specificity 79 to 97%);
3. Fetal biophysical profile (typical positive likelihood ratio 2.5 to 27.4, negative likelihood ratio 0.2 to 0.9);
4. Abnormal fetal heart rate (FHR) recording (typical sensitivity 70%, specificity 80%);
5. Fetal scalp pH (decreases sensitivity to 31% and increases specificity to 93% of FHR monitoring);

   In addition, the following clinical factors may be associated with a low Apgar score:
6. Reduction of liquor volume; and
7. Meconium staining of the liquor.

Perinatal asphyxia may result in fetal demise, neonatal death, or a period of recovery during which there is organ dysfunction with possible long-term effects, particularly in neurological function.

Clinical manifestations of perinatal asphyxia

1. Depression of the neonate at birth with a low Apgar score and acidosis
2. Hypoxic ischaemic encephalopathy (HIE)
3. Multiorgan system dysfunction (% of infants with HIE):
   - Renal compromise with oliguria and elevated creatinine (40%),
   - Hypoxic cardiomyopathy (ECHO or ECG abnormality) (25%),
   - Pulmonary complications including respiratory distress and persistent pulmonary hypertension of the neonate (25%),
   - Disseminated intravascular coagulation,
   - Hepatic failure, and
   - Necrotising enterocolitis.
4. Fluid, electrolyte and metabolic abnormalities
   - Fluid overload, hyperkalaemia, hypoglycaemia, and acidosis.

One third or more of infants with HIE will have 2 or more organ systems involved, which may include lung, heart, liver, brain, kidneys and haematological.

On basic principles, the assessment should include a history of maternal and intrapartum risk factors for problems that may affect the infant including pre-existing medical conditions in the mother, problems of pregnancy, abnormalities identified antenatally in the fetus, the presence of meconium stained liquor, CTG abnormalities, scalp pH, maternal indicators of infection, presentation and method of delivery.

Table 1: Causes of Birth Asphyxia

MATERNAL		FETAL
Antepartum	***Intrapartum***	
Maternal hypotension (epidural, spinal)	Hypertonic contraction	Gross congenital anomaly
Post maturity	Augmentation of labour	Malpresentations
Placental insufficiency (pre- eclampsia IUGR)	PROM	Rh erythroblastosis
Abruptio placentae	MSL	Multiple birth
Chorioamnionitis	APH	Intra uterine Infection
Non attended antenatal care	Intrapartum anemia	Cord around neck
Anaemia	Instrumental delivery	Shoulder dystocia
↑/↓ maternal age	Maternal sedation	Breech delivery
	Cord prolapse	Malnutrition
	Cord compression due to oligohydramnios	Inadequate resuscitation
	Abnormal uterine contraction	Low birth weight
	Prolonged labour/ prolonged trial of labour	
	Precipitate delivery	
	Scar dehiscence	
	Unattended delivery	

Treatment

1. **Immediate Neonatal Resuscitation**
2. **Supportive Care**
   a. Correction of hypoglycaemia
   b. Correction of acidosis: obtain early ABG and correct respiratory acidosis with appropriate ventilatory support. Correct persistent severe metabolic acidosis with bicarbonate over 30-60 minutes.
   c. Treatment of seizures: 1st drug of choice is phenobarbitone; if not controlled add phenytoin; persistent seizures - add clonazepam.
   d. Temperature: maintain core temperature 36 - 37°c, skin temperature 36 - 36.3°c. *Avoid hyperthermia*.
   e. Respiratory status: aim for normocarbia (pCO2 35-45). Avoid hypoxia and hypocarbia.
   f. Cardiac status: use inotropes (dobutamine or dopamine) early if hypotension is present or low flow states documented on ECHO.
   g. Fluid therapy and renal impairment: Infants with anuria / oliguria should receive 40-60ml / kg /day until adequate urine output documented.
   h. DIC: Give vitamin K and replace clotting factors (eg with FFP).
   i. Gastrointestinal feeding: the decision to feed will depend on a clinical assessment of the severity of asphyxia and associated system dysfunction. Feed intolerance is common and NEC may complicate perinatal asphyxia. Breast milk is preferred

Medico legal aspect

The professional liability crisis remains a common problem for obstetricians. Approximately 90% of American College of Obstetricians and Gynaecologists fellows have been sued at least once and 25% have been sued four or more times. Approximately 15% of obstetricians have ceased obstetric practice because of exorbitant premiums.

The affected newborns are more fragile, often extremely small and the risk of life long chronic disease, pain and disability are significant for these patients. Parents often experience emotional and economic distress when their newborn is in the NICU. These factors have contributed to an increased number of allegations against practitioners of neonatal/perinatal medicine. Juries tend to have a natural sympathy for disabled children, even the professional liability crisis remains a common problem for obstetricians. Hence, we as obstetricians have to be more vigilant and always take necessary steps to prevent medical suits.

Ways to minimize medical litigation

1. **Education and training-** Formal & structured education programme is essential to improve CTG interpretation. All maternity units should have a regular compulsory CTG training.
2. **Clinical risk management, audit and communication-** All cases of perinatal mortality & morbidity should be discussed and lessons learnt

Table 2: Clinical workup

Essential Criteria	Clinical Work Up
1. Evidence of a metabolic acidosis in fetal umbilical cord arterial blood obtained at birth (pH <7.0 and base deficit >12 mmol/L)	Arterial Cord Blood
2. Early onset of severe or moderate neonatal encephalopathy in infants born at 34 or more weeks gestation	EEG
3. Cerebral palsy of the spastic quadriplegic or dyskinetic type	MRI head
4. Exclusion of other identifiable aetiologies, such as trauma, coagulation disorders, infectious conditions, or genetic disorders.	Weight, Length, head circumference, Placental pathology, CBC with differential, blood cultures, U/S head MRI head
Additional Criteria [Criteria that Collectively Suggest Intrapartum Timing]	**Clinical Work Up**
1. A sentinel hypoxic event occurring immediately before or during labor	Electronic fetal heart rate interpretation, CBC with Differential, Platelets,NRBC's
2. A sudden and sustained fetal bradycardia or the absence of fetal heart rate variability on the presence of persistent, late, or variable decelerations, usually after a hypoxic sentinel event when the pattern was previously normal.	Electronic fetal heart rate interpretation, CBC with Differential, Platelets, NRBC's
3. Apgar scores of 0-3 beyond 5 minutes	Apgar Score 10 min and 15 min
4. Onset of multisystem involvement within 72hours of birth	PT, PTT, Fibrinogen, LFT's, Creatinine, Electrolytes, Glucose, Calcium, ECHO
5. Early imaging study showing evidence of acute non focal cerebral abnormality.	USG of head, MRI of head

should be promptly applied so as to minimize recurrence. There should be regular audits and meetings. Full explanation to the parents by a senior member of team should be given as soon as possible.

3. **Umbilical cord acid base status-** Analysis of umbilical cord arterial blood gases has important medico legal implication as it enables documentation of the presence of biochemical milieu at the time of birth.
4. **Role of adjunctive intrapartum monitoring tools-** Adjunctive methods like fetal scalp blood sampling, ST analysis are important tools which along with CTG, may decrease unnecessary interventions without adversely affecting fetal outcome.
5. **Adherence to standard protocols-** Standard and updated protocols should be available in all hospitals labour rooms.
6. **Documentation and record keeping-** history, physical examination, drug allergies, chronic medications, plan of management, date and time of investigations done, operative and investigative notes, record of discussions with patient and relative, note about patients not following instruction etc should be documented.

Conclusion

Intrapartum birth asphyxia causes only a small proportion of birth asphyxia. It is a challenge for the obstetrician to achieve optimal maternal and neonatal outcome. Structured education program, use of adjunctive intrapartum assessment tools and adherence to standard protocols as well as diligent record keeping may play a role in reducing adverse events and avoiding litigation. Good and frequent communication with the parents also helps to reduce the gap between expectation and realistic outcome.

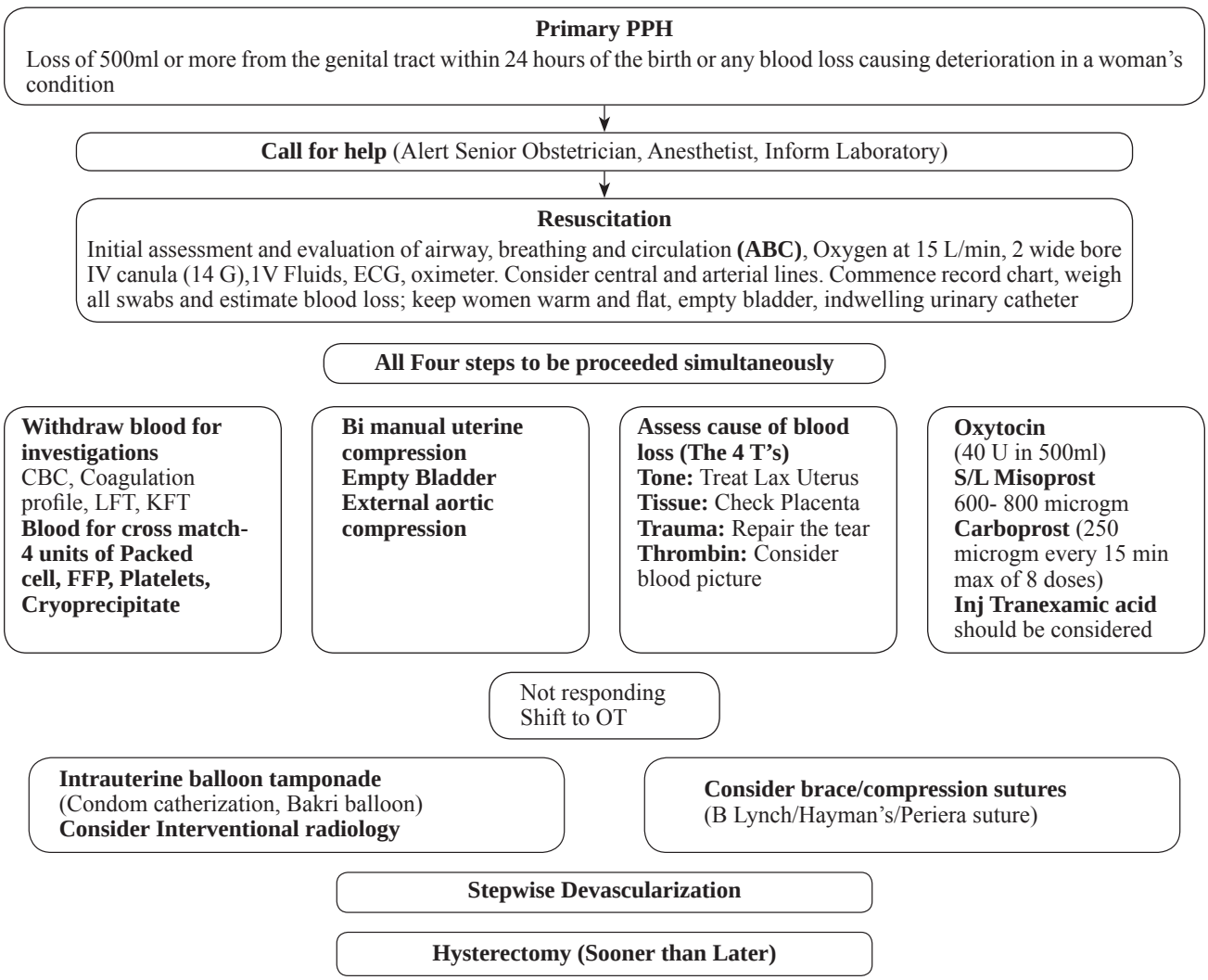
References

1. Birth Asphyxia - Summary of the previous meeting and protocol overview http://www.curoservice.com/health_professionals/news/pdf/10-09-2007_birth_asphyxia02.pdf
2. Bryce J, Boschi-Pinto C, Shibuya K, Black RE: WHO estimates of the causes of death in children. Lancet 2005, 365 (9465): 1147–1152.
3. Lawn JE, Manandhar A, Haws RA, Darmstadt GL: Reducing one million child deaths from birth asphyxia–a survey of health systems gaps and priorities. Health Res Policy Syst 2007, 5:4
4. AzraHaider B, Bhutta ZA. Birth asphyxia in developing countries: current status and public health implications. Curr Probl Pediatr Adolesc Health Care 2006; 36: 178-88.
5. ICD-10 Version. 2010 [http://www.who.int/classifications/icd/icdonlineversions/en]
6. Tyson JE. Immediate care of the newborn infant. In: Effective care of the newborn infant. Ed: Sinclair JC and Bracken MB. *Oxford University Press*. 1992; 21-39.

FLOW CHART

Management of Post-Partum Hemorrhage

Deepika[1], Sunita Malik[2]
[1]Senior Resident, [2]Consultant & Professor, Obstetrics and Gynecology, VMMC & Safdarjung Hospital, New Delhi



Life is a struggle, life means continuing to struggle to the end.
The person who grows stronger with each struggle is happy and is a true being.

The power of faith and positive attitude gives happiness.

Relationship, friends, local community activities create peace.

Friendship is like a book. It takes few seconds to burn, but it takes years to write.

When God solves your problems you have faith in his abilities,
when God doesn't solve your problems He has faith in your abilities.

-*Contributed by* Dr Urmil Sharma

WORLD HEALTH ORGANIZATION GUIDANCE

Ten Facts on Breast Feeding: WHO Fact File

Compiled by Jyotsna Suri[1], Rekha Bharti[2]
[1]Senior Specialist & Assistant Professor, [2]Assistant Professor, Department of Obs & Gynae, VMMC & Safdarjung Hospital, New Delhi

The importance of breast feeding and its benefits for the infant and the mother has been a widely discussed and researched topic in the last decade. It is one of the most important intervention which can save the lives of millions of neonates and infants around the globe. Ten important facts on breast feeding as issued by the WHO, are summarised below to update the obstetrician on the latest recommendations in this area.

1. **WHO recommends:** exclusive breastfeeding for the first six months of life. At six months, solid foods, such as mashed fruits and vegetables, should be introduced to complement breastfeeding for up to two years or more. In addition: breastfeeding should begin within one hour of birth; breastfeeding should be "on demand", as often as the child wants day and night; and bottles or pacifiers should be avoided.
2. **Health benefits for infants:** Breast milk is the ideal food for newborns and infants. It gives infants all the nutrients they need for healthy development. It is safe and contains antibodies that help protect infants from common childhood illnesses such as diarrhoea and pneumonia, the two primary causes of child mortality worldwide. Breast milk is readily available and affordable, which helps to ensure that infants get adequate nutrition.
3. **Benefits for mothers:** Exclusive breastfeeding is associated with a natural (though not fool proof) method of birth control, which gives 98% protection in the first six months after birth. It reduces risks of breast and ovarian cancer, type II diabetes, and postpartum depression.
4. **Long-term benefits for children:** Beyond the immediate benefits for children, breastfeeding contributes to a lifetime of good health. Adolescents and adults who were breastfed as babies are less likely to be overweight or obese. They are less likely to have type-II diabetes and perform better in intelligence tests.
5. **Why not infant formula?** Infant formula does not contain the antibodies found in breast milk. The long-term benefits of breastfeeding for mothers and children cannot be replicated with infant formula. When infant formula is not properly prepared, there are risks arising from the use of unsafe water and unsterilized equipment or the potential presence of bacteria in powdered formula. Malnutrition can result from over-diluting formula to "stretch" supplies. While frequent feeding maintains breast milk supply, if formula is used but becomes unavailable, a return to breastfeeding may not be an option due to diminished breast milk production.
6. **HIV and breastfeeding:** An HIV-infected mother can pass the infection to her infant during pregnancy, delivery and through breastfeeding. However, antiretroviral (ARV) drugs given to either the mother or HIV-exposed infant reduces the risk of transmission. Together, breastfeeding and ARVs have the potential to significantly improve infants' chances of surviving while remaining HIV uninfected. WHO recommends that when HIV-infected mothers breastfeed, they should receive ARVs and follow WHO guidance for infant feeding.
7. **Regulating breast-milk substitutes:** An international code to regulate the marketing of breast-milk substitutes was adopted in 1981. The code directs:
   - all formula labels and information to state the benefits of breastfeeding and the health risks of substitutes
   - no promotion of breast-milk substitutes
   - no free samples of substitutes to be given to pregnant women, mothers or their families and
   - no distribution of free or subsidized substitutes to health workers or facilities.
8. **Support for mothers is essential:** Breastfeeding has to be learned and many women encounter difficulties at the beginning. Many routine practices, such as separation of mother and baby, use of newborn nurseries, and supplementation with infant formula, actually make it harder for mothers and babies to breastfeed. Health facilities that support breastfeeding by avoiding these practices and making trained breastfeeding counsellors available to new mothers encourage higher rates of the practice. To provide this support and improve care for mothers and newborns, there are "baby-friendly" facilities in about 152 countries as part of the WHO-UNICEF Baby-Friendly Hospital Initiative.

9. Work and breastfeeding: Many mothers who return to work abandon breastfeeding partially or completely because they do not have sufficient time, or a place to breastfeed, express and store their milk. Mothers need a safe, clean and private place in or near their workplace to continue breastfeeding. Enabling conditions at work, such as paid maternity leave, part-time work arrangements, on-site crèches, facilities for expressing and storing breast milk, and breastfeeding breaks, can help.

10. The next step- phasing in solid foods: To meet the growing needs of babies at six months of age, mashed solid foods should be introduced as a complement to continued breastfeeding. Foods for the baby can be specially prepared or modified from family meals. WHO notes that:

- breastfeeding should not be decreased when starting on solids;
- food should be given with a spoon or cup, not in a bottle;
- food should be clean and safe; and
- ample time is needed for young children to learn to eat solid foods.

Compiled from
*www.who.int/features/**fact**files/**breastfeeding**/**facts**/en/*

DRUG REVIEW

Ropivacaine in Labour Analgesia

Sujata Das
Chief Medical Officer, Department of Obstetrics and Gynaecology, VMMC and Safdarjung Hospital, New Delhi

Ropivacaine is a member of the amino acid class of local anesthetic which is available as a sterile isotonic solution that contains enantiomers of pure drug substance. It also contains sodium chloride to maintain isotonicity.

Mechanism of action

Ropivacaine is a local anesthetic that blocks the generation and conduction of nerve impulse presumably by increasing the threshold for electrical excitation in nerves and by slowing the propagation of nerve impulse. It also reduces the rate of rise of action potential. In labour analgesia, after the drug is injected in epidural space, it shows complete and biphasic absorption. The slow absorption of the drug is the rate limiting factor for its elimination.

Uses and dosage

1. Labour analgesia - for epidural analgesia initial doses: 20 – 40 mg (10-20 ml) of 0.2 % solution; 12-28 mg/hr (6-14 ml/hr) or 20-30 mg/hr (10-15 ml/hr) continuous infusion of 0.2 % solution
2. Surgical anesthesia
3. Acute pain management

Side effects and drug interactions

Reactions to ropivacaine are characteristic of those associated with other amide type of local anesthetic.

Serious side effects

- Feeling anxious restless and confused.
- Problems of speech
- Ringing in the ears, numbness and tingling sensation
- Tremors
- Weak and shallow breathing
- Convulsions

Minor side effects

- Local reaction at injection site
- Headache
- Fever
- Problem with micturition

Precautions

Ropivacaine should be used with caution in patients who are receiving other local anesthetic agents, or agents that are structurally related to amide group of local anesthetic. Since the toxic effects of the drug are additive, care should be taken for those patients who are on antiarrythmic drugs eg - amiodarone.

Conclusion

Neuraaxial analgesia is frequently administered to women in labour. For many years, bupivacaine has been used for labour analgesia because of its long duration of action; also it has minimal effects on the fetus and neonate. However it is one of the most cardiotoxic drug in current use. Ropivacaine produces less motor blockade and is less cardiotoxic. Ropivacaine has a safer toxicity profile making it ideal for conditions where motor blockade possess a greater risk for patients.

References

1. Basic of Anesthesia, Robert Stoelting, page 289.
2. Jump up^ Rossi S, editor. Australian Medicines Handbook 2006. Adelaide: Australian Medicines Handbook; 2006. ISBN 0-9757919-2-3
3. Jump up^ Weinberg, G; Ripper, R; Feinstein, DL; Hoffman, W (2003). "Lipid emulsion infusion rescues dogs from bupivacaine-induced cardiac toxicity". *Reg Anesth Pain Med* 28 (3): 198–202. doi:10.1053/rapm.2003.50041. PMID 12772136.
4. Jump up^ Picard, J; Meek, T (2006). "Lipid emulsion to treat overdose of local anaesthetic: the gift of the glob". *Anaesthesia 2005; 61 (2): 107-9*. doi:10.1111/j.1365-2044.2005.04494.x. PMID 16430560.
5. Jump up^ Rosenblatt, MA; Abel, M; Fischer, GW; Itzkovich, CJ; Eisenkraft, JB (2006). "Successful Use of a 20% lipid emulsion to resuscitate a patient after a presumed bupivacaine-related cardiac arrest". *Anesthesiology 2006* 105 (1): 217-8. doi:10.1097/00000542-200607000-00033. PMID 16810015.
6. Jump up^ Litz, RJ; Popp, M; Stehr, S N; Koch, T (2006). "Successful resuscitation of a patient with ropivacaine-induced asystole after axillary plexus block using lipid infusion". *Anaesthesia 2006* 61: 800–1. doi:10.1111/j.1365-2044. 2006. 04740.x.

Journal Scan

Sunita Malik[1], Deepika[2]
[1]Professor & Consultant, [2]Senior Resident, Department of Obstetrics & Gynaecology, VMMC & Safdarjung Hospital, New Delhi

Transient Elastography to Assess the Cervical Ripening during Pregnancy: A Preliminary Study.

Peralta L, Molina FS, Melchor J, Gómez LF, Massó P, Florido J, Rus G.

Ultraschall Med. 2015 Aug 7. [Epub ahead of print]

Purpose: To explore the feasibility of transient elastography (TE) to quantify cervical stiffness changes during normal pregnancy and its spatial variability. **Materials and Methods:** TE was used to quantify the cervical stiffness in four anatomical regions. 42 women between 17 and 43 years of age and at 6-41 weeks of gestation were studied. The stiffness was related to gestational age at the time of examination, interval from ultrasound examination to delivery and cervical length to evaluate the potential of TE to assess cervical ripening. In addition, a sensitivity analysis based on Cronbach's alpha coefficient was carried out to assess the concordance between inter/intra-operator measurements. **Results:** There were significant correlations between cervical stiffness measured in the four regions with gestational age and the remaining time for delivery. Results confirm stiffness variability within the cervix. No significant association was found between cervical length and stiffness in the four ROIs. Associations between gestational age and remaining time for delivery with cervical length present weaker correlations than with cervical stiffness. The external part of the cervix was significantly softer than the internal one, and these stiffness values vary significantly in the anterior compared to the posterior cervix. The measurements taken by the same and by two different observers for different regions in the cervix were reliable and reproducible. **Conclusion:** It is feasible to objectively quantify the decrease of cervical stiffness correlated to gestational age. Transient elastography is a valuable promising tool to provide additional information on the process of cervical effacement to that obtained from digital examination and conventional ultrasound. Further studies are needed to assess the feasibility of the technique in obstetric clinical applications, such as prediction of preterm birth or success in labor induction

TRAAP - TRAnexamic Acid for Preventing postpartum hemorrhage after vaginal delivery: a multicenter randomized, double-blind, placebo-controlled trial

Sentilhes L, Daniel V, Darsonval A, Deruelle P, Vardon D, Perrotin F, et al

BMC Pregnancy Childbirth. 2015 Jun 14; 15:135

Background: Postpartum hemorrhage (PPH) is a major cause of maternal mortality, accounting for one quarter of all maternal deaths worldwide. Estimates of its incidence in the literature vary widely, from 3 % to 15 % of deliveries. Uterotonics after birth are the only intervention that has been shown to be effective in preventing PPH. Tranexamic acid (TXA), an antifibrinolytic agent, has been investigated as a potentially useful complement to uterotonics for prevention because it has been proved to reduce blood loss in elective surgery, bleeding in trauma patients, and menstrual blood loss. Randomized controlled trials for PPH prevention after cesarean (n = 10) and vaginal (n = 2) deliveries show that women who received TXA had significantly less postpartum blood loss without any increase in their rate of severe adverse effects. However, the quality of these trials was poor and they were not designed to test the effect of TXA on the reduction of PPH incidence. Large, adequately powered, multicenter randomized controlled trials are required before the widespread use of TXA to prevent PPH can be recommended. **Methods and design:** A multicenter, double-blind, randomized controlled trial will be performed. It will involve 4000 women in labor for a planned vaginal singleton delivery, at a term ≥ 35 weeks. Treatment (either TXA 1 g or placebo) will be administered intravenously just after birth. Prophylactic oxytocin will be administered to all women. The primary outcome will be the incidence of PPH, defined by blood loss ≥500 mL, measured with a graduated collector bag. This study will have 80 % power to show a 30 % reduction in the incidence of PPH, from 10.0 % to 7.0 %. **Discussion:** In addition to prophylactic uterotonic administration, a complementary component of the management of third stage of labor acting on the coagulation process may be useful in preventing PPH. TXA is a promising candidate drug, inexpensive, easy to administer, and simple to add to the routine management of deliveries in hospitals. This large, adequately powered, multicenter, randomized placebo-controlled trial seeks to determine if the risk-benefit ratio favors the routine use of TXA after delivery to prevent PPH.

Alternate Sequential Suture Tightening: A Novel Technique for Uncontrolled Postpartum Hemorrhage

Matsubara S, Takahashi H, Lefor AK.

Obstet Gynecol Int. 2015; 2015: 145178.

Objective: The most commonly described technique of modified B-Lynch suture may not be suitable for all the patients presenting with flabby, atonic uterus. **Study Design**. A retrospective analysis of twelve patients with uncontrolled postpartum haemorrhage, who underwent this procedure from March 2007 to September 2012, was conducted. In this novel technique, sutures are passed in the lower uterine segment and are tightened alternately to control uterine bleeding. **Position and technique:** If medical treatment for PPH fails then the uterus is exteriorized and bimanual compression is applied to assess the feasibility of the Alternate Sequential Suture Tightening (modified B-Lynch) technique. Two number 2 Vicryl sutures preferably on straight needles are mounted. First needle (right side) is inserted into the uterus above (1-2 cm) the bladder reflection and 1-2 cm medial to the lateral edge of lower uterine segment and 1–3 cm below the lower uterine incision. Then needle from this point of insertion into the anterior wall is taken out from the posterior wall at the same level. Then both free ends of the sutures are tied by a knot (double throw) at the fundus of the uterus. Then the knot is held by artery forceps. Similarly, another suture is applied and tied over the fundus and is held with artery forceps on the left side. Then artery forceps on the right side are opened and the suture is tightened further and again forceps are held at further tightened point. Now similar procedure is repeated on the left side. Such alternative sequential tightening of both sutures is repeated 3-4 times till the uterus is completely compressed and bleeding is controlled. Both sutures can be tightened up to around 3–5 cm of their extra length from the initial level of tightening by this Alternate Sequential Suture Tightening technique **Results:** Average duration of the procedure was 4 minutes (range 2–7 minutes). Average blood loss was 1625 mL (range 1300–1900 mL). Eleven patients (91.66%) were seen to have a successful outcome with only this technique. No patient required hysterectomy and one patient (8.33%) required additional bilateral internal iliac artery ligation. All the patients had a minimum follow-up of 2 yearrs and none of them reported any infertility problems. **Conclusion:** This technique is simple, quick, and effective. There was no adverse effect on the fertility potential for the observed 2 years; however, a long-term follow-up is required to comment on its actual rate. This technique cannot replace the standard modified B-Lynch technique for uncontrolled postpartum haemorrhage but can be used for unresponsive, flabby, and atonic uterus.

Proceedings of Monthly AOGD Clinical Meeting held at RML Hospital on 24th September, 2015

Compiled by Archana Misra
Assistant Professor, Obstetrics & Gynaecology, VMMC & Safdarjung Hospital, New Delhi

Four interesting cases were presented along with a video presentation on Management of Shoulder Dystocia.

Case 1

Maternal hydrocephalus in pregnancy: neurosurgeon's headache and obstetrician nightmare

Navdeep Kaur, Sonal Gupta, Poonam Yadav, Indu Chawla

Maternal hydrocephalus requiring ventriculo-peritoneal shunt (VP) placement during pregnancy is a rare phenomenon. Treating obstetrician should be aware of the management of pregnant patients with (VP) shunts. Three cases of pregnancy with Ventriculo-peritoneal shunts inserted for acquired hydrocephalus were presented. Out of three patients two had shunt insertion during pregnancy and in one shunt was inserted prior to conception.

Case 1: Unbooked multiparous patient with 34 weeks live pregnancy, referred by neurosurgeon for obstetric intervention before emergency VP shunt placement required for obstructive hydrocephalus due to Cerebello-pontine angle tumor. During VP shunt placement, concurrent LSCS had to be done for fetal distress. Definite neurological surgery was done 5 weeks after LSCS. Both baby and mother are doing fine at present.

Case 2: Unbooked G2P1with previous LSCS with 31 weeks live pregnancy presented to neurosurgeon with altered sensorium and was diagnosed with B/L thalamic glioma with supratentorial Hydrocephalus. The patient was referred by neurosurgeon for obstetric opinion before placing emergency VP shunt. VP shunt was put under GA, patient received antenatal steroid cover and inj Proluton depot with close FHR monitoring during surgery. Patient was discharged on POD 5 with definite neurological surgery planned after delivery. At present, the patient is 33 weeks 4 days POG with ongoing live pregnancy. There is no evidence of shunt malfunction till date.

Case 3: Patient presented in ANC at 9 weeks of pregnancy with VP shunt in situ inserted 1 year prior to conception for aqueduct stenosis with arachanoid cyst. Her antenatal course was uneventful with level II scan being normal. Patient was advised to continue anti-epileptics as advised by neurologist. According to neurologist, there was no contraindication to normal vaginal delivery, however, LSCS was done for CPD at 38 weeks & a live baby weighing 2.7 kg with normal Apgar was delivered. Patient had uneventful recovery.

Case 2

Obstetric fistula

Priyanka Arya, Bani Sarkar, Majhi, Alka, Ajeet, Batra, Bharti

A 24 years old lady P2L2, reported to GOPD with complaints of leakage of urine since 5 months. She had undergone Em LSCS at term 2 ½ years back in view of NPOL in a govt hospital (U.P). Two years later she had a VBAC whereby she delivered a female baby weighing 3 kgs. She had PPH & cervical tear which was repaired. On the day of delivery she had haematuria for which she underwent cystoscopy & guided removal of bladder haematoma. When she reported to our hospital, per speculum examination was done which showed urine coming through external os. Cystoscopy revealed 1.5cm long rent in the bladder dome & hysteroscopy showed a defect in the lower part of the anterior wall of the uterus. Diagnosis of vesico-uterine fistula (Type-III) was made. After subsequent sterile urine cultures surgery was undertaken. Transabdominally bladder was separated from the uterus f/b repair of the fistulous tract of the bladder & repair of the inverted T- shaped rent just above the level of the internal os with omental patch interposition. Patient is in close follow-up; she is continent & has resumed normal menstruation.

Case 3

Abdominal pregnancy: a diagnostic dilemma

Garima Goyal

Background: Abdominal pregnancy is both the rarest and the most serious type of extrauterine gestation. Incidence is about 10 cases in 1 lakh pregnancies. Maternal mortality risk is 7.7 times greater than a tubal ectopic pregnancy higher than maternal mortality.

Case History: A 40 yr old G4P2L0A1 presented to casualty with 3month amenorrhea and on and off pain lower abdomen for 2.5 months. She had significant previous history of an intrauterine death at 7 months, and a laparotomy for ruptured tubal ectopic pregnancy.

She was severely pale with Hb 6.0gm% and PR-110/min. A 24week size, firm, ill defined mass with restricted mobility and tender on palpation was present on P/A and P/V examinations. UPT was weakly positive. TVS showed 15 week size dead fetus with empty uterine cavity and multiple pouches of free fluid. CECT reported the mass to be an abdominal pregnancy. On laparotomy hemoperitoneum was found and a dead fetus of approximately 14-16 week size extracted from left upper abdomen. Placenta could be removed completely as it was necrosed and hemostasis was ensured. Tubes and ovaries could not be visualized due to adhesions. 3 units blood transfused pre-op and 3 unit blood given intra-operatively.

CONCLUSION: Abdominal pregnancy can be diagnosed with high index of suspicion. Pre-op preparation for anticipated complication in this case was the key for successful management.

Result of the Theory Round of the Gestosis Quiz

S. No	Name of Candidate	Institute
1	Dr Vivek Kukkud	All India Institute of Medical Sciences, New Delhi
2	Dr Neha Sharma	Guru Tegh Bahadur Hospital, Delhi
3	Dr Sanskriti Batra	Sir Ganga Ram Hospital, New Delhi
4	Dr Purnima Gupta	Maulana Azad Medical College, Delhi
5	Dr Neha Handa	Jaipur Golden
6	Dr Priyanka Arya	Ram Manohar Lohia Hospital, New Delhi
7	Dr Bhavana Girish	All India Institute of Medical Sciences, New Delhi
8	Dr Supriya Kumari	Hindu Rao Hospital, Delhi
9	Dr Bhawani Shikhar	All India Institute of Medical Sciences, New Delhi
10	Dr Nikita Kumari	VMMC & Safdarjung Hospital, New Delhi
11	Dr Shweta	Acharya Bhikshu GH
12	Dr Ruchi	VMMC & Safdarjung Hospital, New Delhi

All winners theory round should contact AOGD Office so that they can be registered for oral round on 23rd October at Sir Ganga Ram Hospital, New Delhi

Brain Teasers

Dr Monika Gupta
Assistant Professor
Dept. of Obs & Gynae, VMMC & Safdarjung Hospital, New Delhi

We have been receiving an overwhelming appreciation for the bulletin from all our members. This newly introduced section of Brain-teasers has received a special mention. Our members' participation in form of response to the Quiz will be a value addition to our endeavours. We have a **lucky dip** for all the right answers received and winner's name will be announced in the next monthly AOGD clinical meeting. So, mail your answers to **aogdsjh2015@gmail.com within 7 days of receipt of the bulletin.**

1. As per the latest WHO guidelines for management of second stage of labour which of the following is correct:
   a. Manual protection of the perineum via controlled deflection of the head
   b. Routine episiotomy should be given
   c. Application of hot compresses to prevent perineal trauma
   d. Delivery should be accomplished in lithotomy position

2. In the active management of third stage of labour which of the following is incorrect
   a. Wait for signs of placental separation
   b. Controlled cord traction
   c. Administration of uterotonic before delivery of placenta
   d. Uterine massage

3. In order to prevent primary caesarean deliveries, ACOG has recommended the following criteria to be considered for failed induction
   a. 12 hours of labour without cervical dilatation of 4 cm with membranes ruptured
   b. 24 hours of labour without cervical dilatation of 4cm with membranes intact
   c. 24 hours of labour without cervical dilatation of 6 cm with membranes intact
   d. 18 hours of labour without cervical dilatation of 4 cm with membranes ruptured

4. Which of the following is not an ultrasound parameter observed on a sonopartogram
   a. Cervical effacement and dilatation
   b. Head perineum distance
   c. Intrapartum transabdominal ultrasound station
   d. Head symphysis distance

5. Qualities of an ideal labour analgesic are all except
   a. Should not cross placental barrier
   b. Adequate uterine relaxation
   c. Rapid, profound and consistent analgesia
   d. Should facilitate surgical anaesthesia

6. Regional analgesia in obstetrics is contraindicated in all of the following except
   a. Anticipated massive PPH
   b. Refractory maternal hypertension
   c. Coagulopathy
   d. Raised intracranial pressure

7. Which of the following is recommended by RCOG regarding vaginal breech delivery
   a. ECV is offered after 37 weeks in nulligravida
   b. Diagnosis of breech first time in labour is not a contraindication
   c. Intermittent electronic fetal heart monitoring for breech in labour
   d. Breech extraction should be used routinely

8. Which of the following is not a corrective abdominal surgical procedure for uterine inversion
   a. Ojeco Procedure
   b. Spinelli Procedure
   c. Huntington's Procedure
   d. Haultain's Procedure

9. Which of the following investigation is useful in patients predisposed to anaphylaxis
   a. Serum Phosphate
   b. Urinary Calcium
   c. Mast cell Tryptase
   d. Serum LDH

10. Which of the following has the highest specificity as predictor of low APGAR score
    a. Non reassuring Non Stress Testing
    b. Daily fetal movement count
    c. Fetal scalp pH
    d. Meconium Staining of liquor

Answers to Quiz 5: 1. c; 2. b; 3. b; 4. c; 5. b; 6. b; 7. b; 8. d; 9. d; 10. c

Dr Nikita Jindal, Senior Resident, BSA Hospital, Rohini is the Lucky Dip Winner of Quiz 5. Congratulations!

Royal College of Obstetricians & Gynaecologists-AICC- Northern Zone India

Website: **www.aiccrcognzindia.com**

Chairperson: Dr Sohani Verma: (drsohaniverma@gmail.com / 9810116623)

Vice Chairperson	Hon. Secretary	Treasurer	Web Editors
Dr Nirmala Agarwal	Dr Mala Arora	Dr Anita Kaul	Dr R Sharma & Dr A Dang

Announces next upcoming course (new start)

RCOG UK Franchise MRCOG Part II Final Preparation

Intensive OSCE Course

Thursday 5 and Friday 6 November 2015 (One day Course / 2 Separate batches)
Limited to 20 candidates only

Overview

This RCOG one-day course focuses on improving exam technique to maximise your chances of passing the OSCE exam and being awarded your Membership to the Royal College of Obstetricians and Gynaecologists.

This course is unique in giving you 2 full OSCE circuits with experienced MRCOG examiners. You will receive individual feedback on each station from the examiners. In the OSCE, the actors can award up to 4 marks and you will receive feedback from the actors to help you improve your communication skills.

Learning objectives

- Experience realistic OSCE stations
- Receive valuable feedback
- Observe other candidates' performance
- Understand time management within stations
- Understand the marking scheme for stations
- Interact with professional role players

This course is specifically aimed to help the candidates sitting the Part 2 MRCOG Written Exam and will be sitting the OSCE exam in the Delhi Centre in November 2015 (first time in India). The numbers are strictly limited to 20 only.

Venue: Auditorium, Indraprastha Apollo Hospitals, Delhi-Mathura Road, (Near Jasola-Apollo Metro Station), New Delhi, 110076, India

UK Course Organisers- Mr John Duthie, Mr Mohsen Iskander and Dr Sanjeev Sharma

India Course Organisers- Dr Sohani Verma (drsohaniverma@gmail.com/9810116623)
Dr Saritha Shamsunder - (shamsundersaritha@gmail.com/9313826748)

Contacts for Details- Dr Sweta Gupta (swetagupta06@yahoo.com/8130140007)
Dr Mamta Sahu (mamta2sahu@yahoo.co.in/ 9810106470)

Course Fee: Rs 30,000/-

Registration Guidelines (Online registration available on website)

- Registration form to be downloaded from website www.aiccrcognzindia.com. Online registration available.
- Bank Transfer or Demand Draft must be made in favour of "RCOG NZ 2012 Plus" payable at New Delhi. (cheques not accepted).
- There will be no refunds on cancelation.
- Registration request along with Demand Draft to be posted to the Secretariat mailing address as given below:-

Mailing Address: **RCOG North Zone Secretariat**
Hostel Complex- Basement, Indraprastha Apollo Hospitals, Sarita Vihar, New Delhi 110076
Tel No - 91-11-29871616/2146/2199, 09716801190/09810116623
Email: rcog_nz2012@yahoo.com/drsohaniverma@gmail.com

Postal Registration No. DL -SW -1/4170/15-17
October 14-15, Date of Publication, October 7-8
Registered with Registrar of Newspapers for India
DELENG/2001/04547/8.25" x 11.25"

The largest speciality hospital for women

PRATIKSHA HOSPITAL

Open Now!
Outpatient Clinic at Galleria Market

Now put health on your priority list

W Pratiksha Outpatient Clinic

G.F. 68, DLF Galleria Market, Ph IV, Gurgaon
Ph: 0124 4309898
Open 7 days : 8am - 10pm

* In-house lab services available

W Pratiksha Hospital

Golf Course Extn. Road, Sushant Lok II, Sector-56, Gurgaon
0124 413 1091 info@w-hospital.in www.w-hospital.in

Our Doctors

Obstetrics, Gynaecology & Minimal Access Surgery
Dr. V.K. Bajaj
Dr. Ragini Agrawal
Dr. Nidhi Aggarwal
Dr. Ratna Vasishta
Dr. Pallavi Vassal
Dr. Chandan Kachru

Infertility & IVF
Dr. Pramod Sharma
Dr. Manju Dagar
Dr. Diganta Deka
Dr. Diganta Chetia
Dr. Mujibur Rahman

Pediatrics & Neonatology
Dr. Raktima Chakrabarti
Dr. Somendra Shukla

Pediatrics & Adolescent Medicine
Dr. Savita Chaudhary

Physiotherapy
Dr. Neha Awasthi

Nutrition
Ms. Deepti Tiwari

Psychological Counselling
Dr. Munia Bhattacharaya

Internal Medicine
Dr. Joy Chakrawarty

Pain Management
Dr. Ajay Yadav

Dermatology & Cosmetology
Dr. Anil Agarwal
Dr. Biplav Agarwal

Radiology
Dr. Savita Chopra
Dr. Saurabh Chopra

Ophthalmology
Dr. Dheeraj Gupta
Dr. Rupal Gupta

Gyne-oncology
Dr. Raja Tewari