From KFOG

Presidents message

I am very happy to learn that two consecutive issues of KFOG Journal are being published during AKCOG 2020. I hope this publication will serve as a platform for imparting Scientific knowledge to our members and also a source for better communication. I sincerely hope that this journal may be converted into an e journal and it will give an opportunity to all our postgraduates to publish their work. I wish all success for the journal and also take this opportunity to congratulate the Editorial Team under the leadership of Dr Reji Mohan.

Dr P Gopeenathan
President KFOG.

From KFOG

Secretary’s message

Dear friends and colleagues,

After a long wait our editor is bringing out the first edition of KFOG journal during this AKCOG @ Kottayam. This issue contains article from Dr Ajith, Dr Vivek and Dr Lalithambika and snippets of CRMD meetings compiled by Dr Betsy. This issue also contains the photos of our various activities of our societies which shows the commitment of our members to the federation as well the public. I wish you all happy reading and a enjoy the academic feast at Kottayam AKCOG2020.

Dr Venugopal
Secretary KFOG

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Caesarean section [CS] is the singular most important operative intervention in obstetrics. The rate at which it is done, however, continues to rise ominously. It is our duty to ensure that it is done in a safe and judicious manner.

An informed consent needs to be taken. Use of vaginal cleansing with povidone iodine, prior to CS has been found to reduce the rate of post-operative infection, especially in women who are in labour or present with ruptured membranes. Antacid prophylaxis with H2 receptor blockers, use of prophylactic antibiotics like Cefazoline or Cefuroxime prior to skin incision constitute the mandatory preliminary procedures. A 15° left lateral tilt of the operating table reduces the risk of maternal hypotension.

Usually a transverse abdominal incision like Joel Cohen incision [a straight skin incision 3 cm above the symphysis pubis] is used. Subsequently tissue layers are opened bluntly and if necessary, extended with scissors and not a knife. If the patient is in or anticipating coagulation failure, or while planning classical CS [as in placenta aceta spectrum], a vertical abdominal incision is preferred.
During labour, the bladder becomes an abdominal organ. Hence the peritoneal cavity needs to be opened as high as possible and then carefully extended down. The dextro rotation of the uterus should be corrected before planning the uterine incision, failing which it may become eccentric and extend into the uterine vessels. Next, the loose uterovesical fold is opened and bladder is pushed down 2 – 3 cm to expose the lower segment. In case of prolonged labour, the uterine incision should be made just at the UV fold to avoid entry into the vagina. Outlet forceps or vacuum must be available in the operating theatre to deliver the baby in case of floating head. Delayed cord clamping for 30 – 45 seconds is advisable in healthy babies to improve their haemoglobin levels. Routine suctioning of mouth and nose should be avoided. Active management of third stage must be practised with the use of 5 units of Oxytocin slow IV followed by Oxytocin infusion. The placenta must be removed by controlled cord traction. Generally, exteriorization of the uterus is not required for suturing the uterine incision. It may however be required if there is extension of uterine incision or if field of vision is obscured by heavy bleeding. Separate sutures must be placed at both angles of the uterine incision. The lower edge of the incision may recede inferiorly and be obscured by blood. The posterior wall of the lower uterine segment may protrude forward and mimic the lower flap of the uterine incision. Hence both the edges of the uterine incision need to be properly identified prior to suturing. There is no consensus on single layer versus two-layer closure of uterine incision. However use of two layer closure and avoiding interlocking sutures seem to be sound surgical techniques. Routine closure of the subcutaneous tissue space is not recommended unless subcutaneous fat layer has a thickness of more than 2 cm. Following caesarean section, postoperative monitoring is crucial, especially in the first 6 hours. Thromboprophylaxis in the form of graduated stockings, hydration, early ambulation and low molecular weight heparin based on the risk, should be offered because of the accentuated risk of venous thromboembolism. Following these simple tips can go a long way towards reducing mishaps during caesarean section and ensuring a good maternal and foetal outcome.
Introduction:
When we hear the term ICT+ve, the picture that comes to our mind is that of a G2 or above Rh negative mother with a Rh positive husband and an Rh positive baby, who has failed to take anti-D in the previous pregnancy and subsequently developed antibodies. This is not the picture always.

Let us see a few case scenarios and at the end of the article you will be able to see the different ways in which you may get an ICT positive mother.

Case 1
24 yr old primi, Rh –ve, Husband Rh +ve. No h/o blood transfusion. ICT +ve at booking visit

Case 2
33 yr old, third gravid, Rh +ve, Husband Rh +ve, ICT +ve at 19 weeks

Case 3
24 yr old second gravida, Rh –ve, Husband Rh +ve, first baby Rh +ve – Anti D given, ICT +ve in this pregnancy
**Case 4**
Doctor couple, second gravida, Rh -ve, Husband +ve. First baby Rh +ve, Anti D given -ve. Directly supervised by physician husband himself. ICT +ve in this pregnancy

**Case 5**
21 yr old, SLE. Second gravida, Rh - ve, Husband -ve, First baby Rh -ve, ICT +ve in this pregnancy

**Case 6**
28 yr old primi gravida, Rh - ve, Husband +ve ICT -ve at booking, ICT +ve at 30 weeks ICT +ve - what does it mean?
It means that the mother has some undesired antibodies in her blood that developed at some point of her life against some foreign antigen, most likely to be rh antigen of her partner, of which the most likely one is the D antigen.

The sensitizing event need not be a prior pregnancy. It could be transfusion of incompatible blood or platelets. D antigen is the most common but non D antigens also may cause sensitization.

Autoantibodies in conditions like SLE can also cause sensitization. Although ICT positivity is mostly seen in Rh negative mothers, it may occur in Rh positive mothers where it may be due to non-Rh antigens like the Kell Ag.

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**Prevalence of Red Cell Antibodies**

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<thead>
<tr>
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<tbody>
<tr>
<td>Total study subjects</td>
<td>5347</td>
<td>3577</td>
<td>370</td>
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<tr>
<td>Prevalence of alloimmunisation</td>
<td>1.48% (n=79/5347)</td>
<td>1.25% (45/3577)</td>
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<tr>
<td>Prevalence in Rh negative females</td>
<td>9.43%</td>
<td>11% (41/353)</td>
<td>7% (12/170)</td>
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<tr>
<td>Anti D antibodies</td>
<td>8.85%</td>
<td>9.9%</td>
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<td>Prevalence in Rh Positive females</td>
<td>0.08% (4/5347)</td>
<td>0.125% (4/3179)</td>
<td>0.5 (1/200)</td>
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<td>Non Rh antibodies</td>
<td>Jka, Jkb, M and S.</td>
<td>M, S</td>
<td>Jka, Leb</td>
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<tr>
<td>Non D antibodies</td>
<td>Anti-C, c, E,</td>
<td>C, c, K</td>
<td>C, c,</td>
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</tbody>
</table>

**FEMACON – Trichur 28/1/2017**

**+ve – what to do next?**
When a patient presents with a positive ICT, does these possibilities matter in clinical practice? In a resource limited setting, from the point of view of management, it really doesn’t matter how it occurred.

**Clinically significant red cell antibodies**
Definition: An antibody that shortens the lifespan of a transfused red cell or has been associated with Hemolytic Disease of the Newborn.
Group 1: commonly associated with HDN
Anti-D, -c, -E, -e, -C, -K, -K, -Fya
Group II: may cause a positive DCT
Anti -Cw,-Fyb,-Jka,-Jkb,-Jk3,-S,-s,-M
Group III: not documented to cause HDN
Anti-P1,-N,-H,-Lea,-Leb,-Lea+b,-Lua,-Lub,Sda

*The rule of commons*: ICT positivity is most likely due to the D antigen.

Fetal effects of red cell isoimmunisation:
D antibodies affect the fetus only if it is rh positive. If we know the baby is negative, the worry ends there. Though NIPT has been developed for karyotyping, it does not enable us to find out the blood group. Invasive test is needed for this.

Fetal effects can range from mild anemia to hydrops and IUFD.

How to diagnose fetal anemia early?
To diagnose, we need to suspect which babies are likely to develop anemia. ICT positivity just means that the baby is likely to be harmed, not the extent of harm. We need to know which type of antibody is present and the strength of the antibody response. Most labs are unable to tell which type of antibody but they are able to say how much is present. In our part of the world, quantitative measurement of antibody in IU is not possible. Instead, antibody titers are used. Titer is the lowest concentration / the highest dilution at which the antibodies are still detectable. The higher the titre, the higher the antibody load.

A critical titer is defined as the titer associated with a significant risk of fetal hydrops. Though this may vary among labs, it is generally considered to be 1:16 to 1:32. Only your lab can tell you which level is significant.

**Methods used:**
1) Conventional tube method: considered as gold standard

![The Tube Agglutination Test](image)

<table>
<thead>
<tr>
<th>Tube Agglutination Test</th>
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<tbody>
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<td>1/20</td>
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<td>1/640</td>
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<tr>
<td>Control</td>
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</tbody>
</table>
Advantages of gel method:
- More Sensitive - even traces of antibody can be picked up
- Requires small volumes of sample
- Reproducible
- Stable
- Reaction endpoints are standardized

*But all recommendations are based on the tube method. Do not start managing based on the gel method alone.*

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What do you look for in ultrasound

We look for the MCA-PSV [Peak systolic velocity in the middle cerebral artery]

**Why PSV?** In anemia, there is thinning of the blood with reduced viscosity. Velocity of blood is increased with the reduced viscosity. Also the hyperdynamic circulation contributes to increased velocity.

**Why MCA?** Angle of insonation should be zero to measure velocity of blood flow accurately. This is done best in the middle cerebral artery. MCA PSV is gestational age dependant. So absolute value have to be converted to MoMs. More than 1.5 MoMs means severe anemia. Calculators are freely available: perinatalogy.com

Expected peak velocity of systolic blood flow in the MCA as a function of gestational age.

Rule of thumb: even without calculators, to know the general trend, we can see whether the MCA PSV is >2 X gestational age in weeks. There is a possible error of 5-10%; So the trend of MCA -PSV is more important.

Other signs of anemia include large placenta, hepatosplenomegaly, polyhydramnios, TR, dilated RV.

**Identifying fetal hydrops**

Hydrops is defined as abnormal accumulation of fluid in two or more fetal compartments, including ascites, pleural effusion, pericardial effusion, and skin edema. In anemia the first body compartment to be affected is the abdominal cavity in the form of ascites.
Significance of hydrops: Hydrops indicates severe anemia with a hematocrit of <20%.

When to start fetal monitoring?
- Previously affected fetus - 16 weeks
- Else, closer to 20 weeks
- Interval between two scans
  - depends on the severity
  - can be every 1-2 weeks.

Management based on MCA – PSV

Intrauterine transfusion:
For this a dedicated fetal medicine setup is essential.

Steps
1) Pancuronium 1:1 dilution 0.2mg/kg IM
   - Fetal blood sampling first – HCT < 30
   - Volume calculation = fetoplacental volume x (desired hct-fetal hct) / donor hct

Fetoplacental volume = USG estimated fetal weight X 0.14
- The route can be either intravascular or intraperitoneal.
- Target hct is 40-50% (>24 wks).

- Post transfusion a repeat scan and Doppler has to be done the next day
- Average drop of hematocrit is 1%/day Rpt transfusion planned based on the final hematocrit

Considerations during delivery
In mildly affected fetuses near term vaginal delivery can be allowed. If moderate to severely affected fetuses, prematurity LSCS is to be preferred. Oxytocin is preferably avoided to reduce risk of fetal hyperbilirubinemia Cross-matched blood should be kept ready due to risk of PPH (Hyperplacentosis, polyhydramnios etc. contribute)

Management of neonate:
Infants who received in utero transfusion therapy do remarkably well. Top up transfusions maybe necessary. Rarely, exchange transfusion may be needed.

Follow-up of neonate:
Goal is to keep the neonate asymptomatic but with a modest anemia so as to drive erythropoiesis. Fetus has to be followed up for at least 3 months. Once a reticulocytosis is noted, further transfusion therapy is generally not needed.

Conclusion
ICT should be offered for all antenatal women at booking visit. ICT +vity indicates the presence of antibodies. Antibodies are not always Anti-D antibodies. Anti-D injection should be given into the deltoid. Warming for even 8 mts may cause it to lose its potency Anti-D injection can cause a transient ICT positivity. Specific antibody typing helps but not easily available. ICT +ve fetuses need to be followed up for fetal hemolysis /anemia. Spectrum depends on severity of hemolysis – Mild to moderate cases may not need fetal intervention. Key is early identification of severe anemia and prompt treatment by IUT. MCA PSV is the cornerstone in diagnosis & follow up following IUT. Continuity of care following delivery is vital in obtaining optimum outcome.
Tips for Vaginal Hysterectomy

Where ever hysterectomy is indicated vaginal route is the best option, as it is associated with least morbidity. Despite better patient outcomes and cost benefits, the rate of vaginal hysterectomy is declining. One contributing factor is inadequate training during residency and overwhelming interest of youngsters in laparoscopic procedures for which a lot of training programmes are available.

Vaginal hysterectomy can be for benign gynaecological conditions in a uterus with out descent (NDVH) and along with pelvic floor repair in uterine prolapse.

Tips for NDVH:
Selection of case is very important in NDVH for beginners.
1. Previous vaginal delivery: women who have not delivered vaginally, ligaments will be taut and procedure will be difficult.
2. In contracted pelvis NDVH will be difficult.
3. Mobility of uterus: should be assessed carefully by a bimanual pelvic examination. If restricted mobility, be cautious. A good ultrasound evaluation is mandatory.

Dr. Lalithambica
Prof. and HOD Govt Medical College Alleppy

4. Size and shape of uterus: better to start with uterine size less than 12 weeks, though more important is shape and consistency. Very broad uterus which is very firm as in adenomyosis, procedure will be difficult.
5. Broad ligament fibroid: carefully assess by bimanual examination, avoid vaginal hysterectomy.
6. History of pelvic surgery especially for endometriosis: better to avoid VH.
7. Multiple medium sized fibroids or a single submucus fibroid can be tackled by the technique described below.
8. Proper instruments (strong, good tenaculum, thick stout needles, good needle holders, broad flat speculum), good lighting and assistants familiar with the procedure are very important.

Preparation and procedure:
1. Consent for laparotomy /Laparoscopy should be obtained even if NDVH is planned, because if you are not able to complete vaginally you will have to go abdominally.
2. Apply traction on cx and massage vigourously Uterosacral ligament especially left from below up. This will provide enough space for placing the clamp.

3. Most difficult step for beginners is opening the anterior cul-de-sac. Put a bold incision anteriorly at cervicovaginal junction involving full thickness of vaginal wall from 10 to 2 o’clock position. Cervicovaginal junction is the place where the smooth epithelium on ecto cx meets rugous vaginal epithelium. Reflect it up and identify vesicocervical ligament. Cut the ligament midway, not too close to cervix (beginners often cut it too close to cx for fear of bladder injury), so part of cx is also pushed up and you will not reach UV fold.). If ligament is cut properly, bladder will go up showing the UV fold of peritoneum. Open it then extend the incision at cervico vaginal junction posteriorly, open the POD and proceed with clamping ligaments.

4. If anteriorly you couldn't open UV fold, don't abandon the procedure, first open POD, catch hold of posterior lip of cx with a good tenaculum, assistant has to lift it up, feel for POD, hold vagina and underlying peritoneum with an allis forceps and cut it open, cut should not be on to cx, be sufficiently away from cx to open POD. If you cut close to cx for fear of rectal injury, dissection often proceeds to posterior cervical stroma or in retroperitoneal plane pushing peritoneum of POD away from field of operation and it becomes impossible to open POD.

5. Once POD is opened, feel the ligaments, clamp, cut and ligate, even if UV fold is not opened. Now you can pull the uterus further down, open UV fold and proceed or even clamp uterine vessels also before opening UV fold.

6. While tackling pedicle, in difficult cases, after clamping, place the suture put one knot and then only cut the tissue. So you can quickly tighten suture and complete ligation soon after cutting. As the stump is under traction, there is always a tendency to slip.

7. If size more than 12 weeks, after securing uterines, we can bisect the uterus, push one half in and proceed with clamping, cutting and ligating upper pedicle of the accessible half and then complete the other. If submucus fibroid, enucleate fibroid and then proceed.

8. If indicated can remove ovaries also. Here a right angle clamp with a long resistance arm is very useful. If infundibulopelvic ligament is very short, identify ovary, apply a little traction, to generate space for the clamp which is applied from above. Applying clamp close to pelvic side wall can endanger the ureter. Here also place suture, put one knot and then cut, tighten the knot and remove clamp.

9. During procedure use minimum instruments so that surgeon’s view is not obstructed.

10. Cut thread of each suture then and there. Leaving long thread with mosquito on its end can loosen the knot and it will be difficult to control bleeding from stumps which are high.

11. In previous cesarean delivery, after cutting vesicocervical ligament, bladder may not move up freely. Some sharp dissection needed to separate bladder from the scar which is extraperitoneal.

12. Injecting adrenaline or vasopressin or saline to delineate plain and reduce bleeding is practised by some. It is not my routine practice. If you dissect through correct anatomic plain, bleeding will be minimum.
Thrissur: 25 cases of maternal deaths were discussed maintaining absolute anonymity. The causes are given in the following table.

<table>
<thead>
<tr>
<th>Cause</th>
<th>Number</th>
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<td>PPH</td>
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<tr>
<td>Anaesthesia deaths</td>
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<tr>
<td>AFLP</td>
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<tr>
<td>Sepsis</td>
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<tr>
<td>VTE</td>
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<tr>
<td>Heart disease</td>
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<tr>
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<tr>
<td>Autoimmune encephalopathy</td>
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<tr>
<td>Vertebrobasilar stroke</td>
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<tr>
<td>Restrictive lung disease</td>
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<tr>
<td>Ruptured ectopic</td>
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<tr>
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<td>Hypertensive disorder, ICH</td>
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<tr>
<td>Bowel perforation</td>
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<td>Unknown</td>
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</tbody>
</table>

Avoidable or Not Number
1. Unavoidable 9
2. Avoidable in an average medical setting 8
3. Avoidable only in the best settings 7
4. Cannot comment 1

Observation: A series of 5 Anaesthesia related deaths were reported during last 6 months. Three were due to cardiac arrest immediately after extraction of the baby. In two cases the patients developed severe pain in the buttocks soon after spinal was given, had seizures and cardiac arrest soon, referred to higher centres and died.

Recommendation: There was detailed discussion of the possible causes of these deaths. Amniotic fluid embolism, adverse drug reaction, supine hypotension syndrome, and intrathecal administration of unintended drug were the possibilities considered. It was pointed out that in the literature similar cases were reported with suspicion of other drugs in place of bupivacaine being administered intrathecally. An example of such drug reported was tranexamic acid. This is of relevance to the present context because tranexamic acid is now used in many theatres for treating PPH during caesarean section.

The state coordinator was directed by the CRMD committee to bring this to the attention of the Principal Secretary, Health, Kerala. We should request for a government order directing all doctors, nurses and technicians to double check before administering any drug.
intrathecally. Two people should verify the correctness of the drug and enter the names of the two persons in the case records. The other observation was that the labels on some of the drugs are so small that they cannot be read with naked eye. The State coordinator was directed to bring this to the attention of the Principal secretary health and through him the Drug Controller General of India for remedial action.

The obstetrician as well as anaesthesia staff have to see that left lateral tilt is given during caesarean section until the baby is delivered. As a general good practice point, all centres should see that "look alike" drugs are not kept together in the same tray as there is risk of wrong drug being administered.)

**Observation:** A 29 year old G3P2L2 with 2 FTND underwent LSCS for breech. Developed PPH, Relap after 5 hours; 1.5 litres of blood in the peritoneal cavity, oozing from the uterine incision, Obstetric hysterectomy done. Developed DIC, transfused 4 PC and 4 FFP. Developed cardiac arrest resuscitated, developed pulmonary oedema referred to higher centre and died there. There was no documentation of post operative monitoring. Obviously it could have been a traumatic PPH to start with which was not detected and led to atonicity of uterus later on and DIC.

**Recommendation:** ECV has a high success rate especially for multis and has to be recommended to all without contraindications. Though uterine artery ligation was done for this case, it has to be done below and above the lateral extension. Separate angle sutures should be taken for all cases of LSCS. Careful post operative monitoring can detect problems before the patient becomes worse. Over enthusiastic resuscitation can lead to pulmonary oedema as in this case. DIC correction has to be vigorous. Referral of hypovolaemic patients should be with NASG.

**Observation:** A 21 year old G2A1 underwent emergency LSCS for breech with PROM. Abdominal distension from post operative day (POD)3. Managed conservatively, paracentesis done on POD 5 and frank pus aspirated. Laparotomy done, found 3x2 cm rent over caecum with 2 litre pus and faecal material in peritoneal cavity, rent repair with ileostomy done. Developed MODS and expired on POD 10.

**Recommendation:** Careful opening of the peritoneum; the possibilities considered were spontaneous perforation of the caecum or accidental laceration with instruments. Careful incision on the uterus, and careful closure of abdominal wall can avoid an injury or accidental bite through the bowel. Earlier laparotomy might have saved this lady. Contrast CT would be the investigation of choice.

**Observation:** A 22 year old G2P1L1 presented on the 22nd day of LMP with pain abdomen, USS done, massive hemoperitoneum, patient collapsed. Resuscitated and referred to higher centre. Emergency laparotomy done. 1.5 – 2 Litres of hemoperitoneum, Right salpingectomy done for ruptured ectopic, blood and components transfused, but succumbed.

**Recommendation:** Simultaneous resuscitation and surgery in the first centre should have been the ideal option here rather than referral. Any lady in the reproductive age group with abdominal pain, ectopic gestation should be suspected and UPT should be done.

**Observations:** A 45 year G3A2 conceived by ICSI, Overt DM, cervical encercalage at 12 weeks. On second day she developed abdominal distension and reduced urine output. Referred to MCH, CRP and counts raised, higher Antibiotics started. She had hypotension, desaturated and was ventilated. Hemodialysis done, cerclage removed on third day, USS showed missed abortion next day, medical
evacuation done, coagulation profile altered. Components transfused, patient expired the next day.

**Recommendation:** Cervical encerclage was not indicated in the first place, that too in an uncontrolled DM. Just because of ART, encerclage need not be done routinely. Sepsis bundle is to be adhered to once Sepsis is suspected like IV fluids, blood culture, broad spectrum Antibiotics, ionotropes etc.

**Observation:** A gravida 3 with 2 FTNDs was induced for oligamnios with PgE1 and Oxytocin. Head receded at full dilatation with fetal distress. Still vaginal delivery completed with vacuum and fundal pressure. As placenta was retained, MROP done and a rent detected. Referred to MCH but she reached there in irreversible shock on the theatre table. Observations: Rupture was not suspected when the head receded. An immediate caesarean section could have identified the rupture and patient saved.

**Recommendations:** Avoid Oxytocin immediately after ARM. Wait for atleast one hour. Oxytocin should be monitored carefully.

**Other recommendations:**
No LSCS for cord around the neck. Radiology friends have to be requested not to report cord round the neck unless there are multiple loops. Also not to alter EDC on the basis of third trimester USS report.

In the case of critically ill patients a Medical Board should be formed with Obstetrician as the Coordinator. This is because each specialist would concentrate only on his system and this may adversely affect another system. For eg. Gentamicin was given when creatinine levels were abnormal in a patient with hepatorenal dysfunction. Lorazepam and Fentanyl was given in a patient with hepatic encephalopathy.

Auscultate all antenatal women in the first visit to rule out heart disease as in one case Mitral stenosis was detected only at 27 weeks when she presented with haemoptysis.

Patients operated for heart disease and started on anticoagulants should be continued on therapeutic anticoagulation during pregnancy in consultation with the cardiologist.

Severe Pulmonary artery hypertension is an indication for termination of pregnancy at 34 weeks.

Stress induced dilated cardiomyopathy can occur as a sequel to Hypotension and acute hypoxic myocardial damage and should not be misinterpreted as Peripartum cardiomyopathy.

Transvaginal uterine artery clamp is to be used a first aid in PPH to arrest bleeding immediately (even before medical management) and not when all measures fail.

MEOWS (Modified Early Obstetric Warning Score) chart to be used for all pregnant women instead of the routine TPR chart for monitoring. The nurses should be instructed to report to the doctor in case of two yellow readings or one red reading.

Use standard stamps to enter PV examination findings and for postnatal monitoring so that no points will be missed.

Pocket pulse oxymeter has to be added to the armamentarium of the rapid response team in Obstetrics.

Termination of pregnancy in Jaundice complicating pregnancy is preferably vaginal, LSCS only if otherwise indicated as it can increase the morbidity

Start Oseltamivir for all Flu like symptoms at the earliest. H1N1 vaccination (IM and not nasal) is safe from first trimester.

CRMD meeting was followed by Maternal Near Miss meeting. It was decided to forward the CRMD snippets to District Captains and Vice Captains for MDNMSR so that it could be discussed in the next district MDNMSR meetings.
SNIPPETS from the third QUARTERLY CRMD MEETING on 15th September 2019 at TOGS Academia Thrissur:

29 cases of maternal deaths were discussed maintaining absolute anonymity. The causes are given in the following table.

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<th>Cause</th>
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<td>Septic abortion</td>
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<td>Viral pneumonia</td>
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</tr>
<tr>
<td>Congenital diaphragmatic hernia</td>
<td>2</td>
</tr>
<tr>
<td>Hypertensive disorder, Eclampsia</td>
<td>2</td>
</tr>
<tr>
<td>AFLP</td>
<td>1</td>
</tr>
<tr>
<td>PPH</td>
<td>1</td>
</tr>
<tr>
<td>Placenta accreta spectrum</td>
<td>1</td>
</tr>
<tr>
<td>VTE</td>
<td>1</td>
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<tr>
<td>Ruptured ectopic</td>
<td>1</td>
</tr>
<tr>
<td>Rupture uterus</td>
<td>1</td>
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<tr>
<td>ICH</td>
<td>1</td>
</tr>
<tr>
<td>Aortic root dissection</td>
<td>1</td>
</tr>
<tr>
<td>RTA</td>
<td>1</td>
</tr>
<tr>
<td>Unknown</td>
<td>2</td>
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</table>

Observation: Three cases of septic abortion:
1. Severe anemia and AKI after 10 days of medical evacuation of missed abortion, at 8 weeks.
2. Self MTP (incomplete) at 14 weeks with over the counter medication, foul smelling retained products, suction evacuation, uterine fundal tear (handled outside), pyelonephritis, TAH+BSO, succumbed.
3. Pregnancy with CuT in situ, missed abortion, CuT removed, PGE1 tried, D&E done, reported back after one week with fio severe sepsis, succumbed 3 days later.

Recommendation: All medical/medication abortion should have a check USS after 2 weeks if at all not immediately indicated. The success rates of medical evacuation drastically falls after 9 weeks; we should have a low threshold for subsequent surgical evacuation after 9 weeks of gestation as the chance of incomplete medical abortion is high.

Observation: A 25 year old G2A1 at 32 weeks admitted for 20 days with PPROM in MCH. Discharged, went to a private hospital after 3 days with pain abdomen, induced with PGE1, LSCS done for patient’s request. She had loose stools on POD 1, Urine output reduced on POD 3, Urea – 78, S. Creat – 4. Referred to MCH, TC – 30,400, Platelets- 45000. Started on higher Antibiotics, 8 cycles of hemodialysis given, thromboprophylaxis given. Developed respiratory distress on POD 19 and succumbed.

Recommendation: Termination of pregnancy is recommended at 34
weeks in cases of PPROM. Sepsis screen (TC, DC, CRP, High vaginal swab) should be done during the waiting period. Oral Erythromycin is recommended for 7-10 days in prolonged PPROM. Cleaning the cervix and vagina with antiseptic solution (can be done while catheterising the bladder) before LSCS has been found to reduce the incidence of Surgical site infection. MEOWS chart for monitoring will definitely pick up the subtle warning signals of sepsis.

**Observation:** A 32 year old Primi at 32 weeks presented with head ache and epigastric pain, high BP at private hospital, referred to MCH, developed seizures there. Ventilated, LSCS done, remained unconscious. Shifted to another higher centre. CT brain revealed 5x5 cm hematoma in Right corona radiate and gangliocapsular region, extending into lateral ventricles, with midline shift of 8 mm. Managed medically with anticonvulsants and antioedema measures. Condition worsened and she expired next day.

**Recommendation:** ‘A fit will not usually kill a patient but a bleed will.’ Everyone does timely referral but appropriate and safe referral is also a must. In such cases antihypertensives (IV Labetalol or atleast oral Nifedipine) and MgSO4 before referral would have made a difference.

**Observation:** 31 year old G2P1L1 at 31 weeks with fever, cough and breathlessness for 2 days. Started on Antibiotics, had left lower lobe consolidation, shifted to ICU after 2 days. Oseltamivir started. Destuated, ventilated, emergency LSCS done for fetal distress. Developed hypotension started on inotropes. Expired on day 6.

**Recommendation:** Oseltamivir should have been started on Day 1 itself. Dose is 150mg BD when chest signs and features of pneumonia exist. A combination of Ceftriaxone and Azithromycin along with Oseltamivir would cover even atypical bacteria in such cases.

The CRMD committee has decided to recommend to the Government the need to vaccinate our pregnant women against influenza like illness.

**Observation:** We had 2 cases of congenital diaphragmatic hernia, one presented at 30 weeks with chest pain and massive Left pleural effusion. Pleural tapping, IUD expulsion and CDH repair was the course of events, but succumbed on Day 6. Second lady developed severe epigastric pain and nausea on POD 13 of LSCS after IVF pregnancy, collapsed and died. Autopsy revealed CDH.

**Recommendation:** It is first time we come across CDH as a cause of death, that too 2 cases. We have to keep our ears and eyes open, especially when our women report unusual epigastric and chest pain with nausea and vomiting.

**Other recommendations:**
IOL protocol to be adhered to; the mechanical method with Foley’s catheter and extra amniotic saline to precede medical induction with poor Bishops score.

MEOWS (Modified Early Obstetric warning Score) chart to be used for all pregnant women instead of TPR chart for monitoring. The nurses should be instructed to report to the doctor in case of two yellow readings or one red reading.

Termination of pregnancy in Jaundice complicating pregnancy is preferably vaginal, LSCS only if otherwise indicated. Minimum 6 months gap between myomectomy and next conception ECV to be routinely offered to atleast Multi with breech.

Don’t underestimate blood loss in PPH. It can be as much as three times the estimated blood loss.

Start Oseltamivir for all Flu like symptoms. H1N1 vaccination (IM and not nasal) is safe from first trimester.

CRMD meeting was followed by Maternal Near Miss meeting.
KOTTAYAM SOCIETY ACTIVITIES
യത്ത് എത്താൻ കാര്യം കാര്യം...
ശരി സാമ്പിളിനോട് മുന്നോട്ട് പൊക്കാടാലോ.