SNIPPETS OF CRMD MEETING ON 25/09/2022 AT TOGS ACADEMIA THRISSUR

A total of 35 cases of 2021-2022 were discussed in a confidential manner. The causes were as follows:

Covid	6
PPH	5
Intracranial haemorrhage	5
Pulmonary embolism	3
Sepsis	3
Suicide	2
Amniotic fluid embolism	1
SLE	1
AFLP	1
Catastrophic APLS (Antiphospholipid antibody syndrome)	1
RHD	1
Connective tissue disease	1
AML	1
Pancreatitis	1
Secondary abdominal pregnancy	1
EHPVO	1
PPCM	1

We analysed each of these deaths and subcategorised into the following :

TYPE OF DELAY	**NUMBER**

1.Delay from the part of patient and family	7
2.Delay in reaching the institution	1
3.Delay after reaching the institution	5
4.No delay identified	16
5.Cannot comment	5

AVOIDABLE OR NOT	**NUMBER**
1.Unavoidable	21
2.Avoidable in an average medical setting	4
3.Avoidable only in the best settings	5
4.Cannot comment	2

Observation: 28 year old G3P2L2 at 38 weeks found to be COVID positive , referred to a second centre , Enema given , started leaking . She developed hypotension referred to MCH (third centre) where she reached at 3:14 am .O/E Vitals stable, directly shifted to second stage as head was outside the outlet . Delivered a deeply asphyxiated 3.6 kg baby following which she developed severe atonic PPH, went into shock. Initial first aid measures (TVUAC and

Suction cannula) failed , Obstetric hysterectomy done by 5 am. 66 units of blood and products were transfused . Post op she was on ventilator and inotropic support. She had cardiac arrest on POD 1 and revived . Developed DIC, severe LV dysfunction, AKI, ischemic hepatitis and expired on POD 2 at 5:45 am.

Recommendation : Routine COVID testing and Referring a patient just because she is COVID positive , is it justifiable ? It took 8 hours for the patient to reach the third centre from the first centre ! Though it seems that everything has been done , TIMING of first aid measures like TVUAC and Suction cannula are important. Here TVUAC is applied 10 minutes and Suction canula is applied 20 minutes after the onset of PPH. Please remember TIME IS LIFE ! There is a paradigm shift in the order of the first aid measures, TVUAC and Suction cannula should be used even before the medical management as the action is immediate. Condom tamponade and Vaginal packing have lost their role in PPH management. AMTSL should be used in all cases including Caesarean and DOCUMENTED TOO. The present KFOG protocol for AMTSL is Inj. Oxytocin 5 units IV and 10 units IM at the delivery of the anterior shoulder followed by 20 units in 500 ml NS over 2 hours. We have to inform our Anaesthesia colleagues about the protocol as they are the ones to administer the drug during Caesarean .

Observation : 27 year old Second gravida underwent LSCS for twins. Discharged. Developed sudden breathlessness and loss of consciousness at home on POD 21. She was brought to ED in cardiac arrest. CPR done by ACLS protocol , ROSC (Return of Spontaneous Circulation) 12 minutes of CPR and adrenaline . Transferred to cardiac ICU. ECHO showed severe LV dysfunction, RV function normal. She was put on ventilatory support and inotropes. CT brain showed signs of hypoxic ischemic encephalopathy. Situation worsened and she expired next day. Cause of death : PPCM (Peripartum cardiomyopathy)

Recommendations : High level of suspicion is required to diagnose PPCM , a disease of the last 1 month and post partum 5 months of pregnancy. BOARD regime for PPCM : **B**romocriptine **O**ral heart failure therapy **A**nticoagulation **R**elaxants(vasodilators) **D**iuretics . Bromocryptine is recommended now as Prolactin is implicated in PPCM. The risk of recurrence in next pregnancy is 50 %.

Observation : A 37 year old Gravida 3 Para1 Live 1 A1 at 38 weeks referred from GH to MCH in view of high BMI, difficult spine , hypertension and GDM at 37 weeks . Previous FTND , 10 years back . Induced with Oral PGE 1 25 mcg four doses 2 hourly. Leaking at 5:45 am next day. Unfavourable cervix . Seizures at 6 am . MgSO4 given, went into asystole . Code blue activated . Perimortem CS done , baby delivered at 6:27 am 3.5 kg , NND . She succumbed in spite of all efforts.

Recommendation: Though the provisional diagnosis is Eclampsia, going through the case records , up rolling of eyes, tongue bite and involuntary passage of urine and faecal matter are documented and not GTCS. Timing of seizure activity also is in favour of AFE (15 mts after leaking). Mechanical ripening of cervix (Foleys catheter with or without EASI : Extra amniotic Saline infusion) should have preceded Medical Induction of labour. This case signifies the importance of having ORRT (Obstetric Rapid Response Team) in every hospital .

Observation: A 25 year old G2P1L1 Prev. LSCS with H/o bleeding at 32 weeks , diagnosed placenta previa . Elective LSCS at term , placenta did not deliver completely , found to be adherent on the left side , removed piece meal. Blood transfusion started , patient went into shock . Spinal converted to GA. B/L uterine artery ligation and Hayman's sutures done. Abdomen closed with drain, Two hours later patient developed profuse bleeding suction cannula applied for 15 minutes, bleeding reduced. Vagina packed and referred to higher centre, accompanied by Anaesthesiologist and Gynaecologist . Patient arrested on the way. Resuscitated , pack removed , no active bleeding , Massive transfusion given . Though patient showed initial improvement ,torrential bleeding started went into shock and succumbed same night.

Recommendation: Such patients should be managed only in tertiary centres. It was a known case of placenta previa with previous LSCS , PAS (Placenta accreta spectrum) should be suspected in all such cases unless proved otherwise. The practices which would have made a difference in this case are usage of Aorta / Common iliac artery clamp and timely Obstetric hysterectomy. If it is difficult to use aorta clamp through pfannensteil incision (unanticipated cases), B/L Common iliac artery clamps would suffice.

Observation : 39 year old G2P1L1 at 36 weeks , k/c/o hypothyroidism delivered vaginally. H/o GDM . UTI with Klebsiella diagnosed after discharge ; advised admission , not willing. On PND- 10 , reported to local hospital with abdominal distension and breathlessness of 1 day. Diagnosed as AKI, Sepsis. Evidence of hepatomegaly and patchy ground glass lesions in bilateral upper and lower lobes of lungs . In view of septic shock , referred to higher centre. Reached higher centre in shock, tachypnoea, B/L basal crepitations . Spo2 98.5% on 15 litres O2. Patient drowsy , immediately intubated and put on ventilator support , inotropes and broad spectrum Antibiotics. She had metabolic acidosis next day , had cardiac arrest , could bot be revived. **Diagnosis** : Urosepsis, MODS.

Recommendation: An early sign of pyelonephritis is renal angle tenderness. Going through the notes , it is written refusal of admission from the part of the patient. Perhaps the treating team could have insisted that the patient at least takes IV antibiotics from local hospital. Definitely early admission would have made a difference with Surviving Sepsis Campaign bundle which consists of Blood culture, Serum lactate estimation , IV fluids, Early broad spectrum antibiotics, vasopressors etc

Observation : A 27 year old G5A4 at 27 weeks had LSCS at 26 weeks following PPROM in a peripheral hospital .She was treated with I V Piptaz, Meropenam, Metronidazole and prophylactic LMWH. She developed sepsis with shock and desaturation and was managed with NIV, inotropes and Antibiotics. HRCT showed Right pleural effusion and lower lobe consolidation . Sputum culture revealed MRSA. Referred to higher centre on POD – 11 . On admission , patient conscious , afebrile, PR – 112/mt, BP – 98/67 (on Noradrenaline). Her condition worsened, intubated and put on mechanical ventilation . Triple inotropic support initiated. CECT after 2 days showed dehiscence of anterior wall of uterus. Patient hemodynamically unstable in the CT room Sustained cardiac arrest and expired.

Recommendation: LSCS at 26 weeks is technically difficult. A vertical lower segment incision may be a better option. Will need Mini forceps to deliver the baby. It is better to pack both the paracolic gutters before putting uterine incision so as to avoid infection spreading to the upper abdomen. And of course be on the look out for sepsis in such cases , MEOWS (Modified Early Obstetric warning

Score) chart should be part of our daily practice and do not forget Surviving Sepsis campaign bundle.

Other Recommendations :

The Golden Hour after delivery is replaced by the Golden 3-4 minutes when we have to identify the bleeding and take steps to arrest bleeding and correct hypovolemia.

Use Tranexamic acid early in the course of PPH.

Catastrophic APS is diagnosed when 3 or more organs are involved in less than a week with lab confirmed APLA on 2 occasions 12 weeks apart. Cyclophosphamide and IV Ig are the treatment.

Current Influenza vaccine has 90 % protection against H1N1.

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