A RARE CASE OF SPONTANEOUS HAEMOPERITONEUM IN THE THIRD TRIMESTER

SARALA
Department of Obstetrics and Gynaecology, STANLEY MEDICAL COLLEGE AND HOSPITAL

Abstract:
Occurrence of spontaneous haemoperitoneum during pregnancy is rare. In this journal, a case of 28 year old women gravida 4, para 3, live 2, abortion 1, who presented with acute abdominal pain and not able to perceive fetal movements for 4 hrs, is presented. Ultrasound scan of the patient confirmed absence of fetal cardiac activity and the mother was haemodynamically unstable. Hence, emergency caesarean section was done with clinical suspicion of abruption. The cause for haemoperitoneum could not be found.

Keyword: spontaneous haemoperitoneum, abdominal pain, caesarean section

Introduction
Spontaneous haemoperitoneum during pregnancy is rare. If it occurs, it results in serious maternal/fetal morbidity and mortality. This complication can occur at any gestational age, but the majority of cases tend to occur in the third trimester. It is reported that 61% of the cases of unprovoked peritoneal bleeding occur antenatally, 19% occur intrapartum and 21% occur puerperal. In 1950s, maternal mortality rate was around 49%, and now in this century, advancements in resuscitation, anaesthetic and operative techniques has resulted in decline in this rate to about 3.6%. Perinatal mortality due to spontaneous haemoperitoneum in the last trimester has remained high 31-36%. In this journal, we have reported the case of 28 year old multiparous women who had severe abdominal pain with intra uterine death at 38 weeks of gestation. Spontaneous intra abdominal bleed was found after exploratory laprotomy.

Case report
28 year old women gravida 4, para 3, live 2, abortion 1 presented at 38 weeks of gestation with severe abdominal pain and not able to perceive fetal movements for 4 hours. The pain was
sudden in onset. No history of bleeding per vagina was reported. She was booked and immunized at Minjur PHC. It should be noted that she has had regular antenatal checkups and presented no risk factors. When she presented at our hospital for the first time, she was acutely ill. 2 intravenous (IV) lines were started and cross matching samples were taken. Patient was conscious, oriented, severely pale, no pedal edema and temperature was normal. Other factors include pulse - 128bpm, BP- 90/60mmHg, RR- 18/min, O2 saturation - 98%. Cardiovascular and respiratory systems were within normal limits.

Since the patient’s condition was deteriorating with fall in BP, increasing pallor and pulse 140 bpm, injection Dopamine was started and 2 units of fresh whole blood was transfused. Subsequently, urine output was monitored by bladder drainage with foley’s catheter. After stabilising the patient’s vital parameters, informed consent for surgery was taken. Pre-op antibiotics were given and the patient was taken up for emergency lower segment caesarean section. On opening the abdomen, around 2 liters of clotted blood was evacuated from the peritoneal cavity, and the emergency LSCS was proceeded to deliver a dead born boy weighing 3.5 kg. Placenta and membranes were delivered in toto. Uterus was closed in 2 layers. There was no evidence of retroplacental clot, and hence abruptio placenta was ruled out. The uterine contour was normal. On the posterior surface of the uterus there was a capillary ooze, so compression was applied and bleeding was stopped. Since the uterus was intermittently relaxing prophylactic B- lynch sutures were applied. Surgeons were called over to rule out other causes for haemoperitoneum. Liver, spleen and bowel were normal. No cause for haemoperitoneum was found. After obtaining complete haemostasis, the abdomen was closed in layers, with intra abdominal drain kept in situ. She remained stable throughout: pulse -110bpm, BP-110/70mm Hg, oxygen saturation - 100%, adequate urine output. Post operatively abdominal girth was monitored and nil collection in the drain was observed. She was given 3 units of packed cells post operatively.

**on opening the abdomen - haemoaperitoneum**

Per abdomen: soft, uterus corresponded to 36 weeks size, not rigid, no tenderness, not tense. Fetal heart rate not localized. Pelvic examination: cervix soft, 50% effaced, 2cm dilated, membranes intact, vertex at -3 station, pelvis adequate, no bleeding per vagina. Ultrasound was performed and the observations include, BPD- 9.1(38 wks+1 day), FL-7(37 wks), liquor adequate and fetal cardiac activity absent. Placenta anterior had no retro placental clot. Investigations were taken for complete haemogram, platelets, renal and liver function tests; PT, aPTT, INR, bleeding time, clotting time; and urine albumin, sugar and deposits. Selected results: Hb - 6.4gm/dl, PCV - 18%, Platelets -1,95,000 cells/cmm, RFT and LFT-normal, PT, aPTT, INR- normal, BT and CT - normal.
Evacuated blood collected

Discussion
Spontaneous haemoperitoneum during pregnancy is rare, though it may cause life threatening complications. There are only 117 reported cases². This typically presents as sudden onset of abdominal pain with signs of hypovolaemic shock without revealed bleeding. A marked reduction in haemoglobin is a typical finding². This diagnosis is rarely made before exploratory lapotomy, therefore in such instances abruptio placentae can be a common differential diagnosis.

The most common reason for spontaneous haemoperitoneum is rupture of the utero-ovarian vessels. Etiology of this condition is not well understood. It has been hypothesized³ that the most probable cause is dilated utero-ovarian vessel. This can result from increased physiological demands during pregnancy. There are various activities that cause sudden rise in venous pressure such as coughing, defecation, coitus or straining during second stage of labour. It has been proposed that in a healthy pregnant women, extensive physiologic hypertrophy of the uterine vessels deals with the pressure fluctuations. Various literature say that endometriosis related complication can occur in late pregnancy in the form of spontaneous haemoperitoneum⁴. Endometriosis can cause vascular defect invading the utero.ovarian vessel⁵. Pregnancy per se can influence endometriosis by promoting the involution of the implants. It has been recently suggested that there is a protective role against preeclampsia⁶. Chronic inflammation caused by endometriosis can make the vessel fragile and more prone for rupture. The subsequent adhesions may produce greater tension on the utero-ovarian vessels; this effect is more obvious when the uterus enlarges during pregnancy.

Conclusion
To conclude, maternal mortality rates due to spontaneous haemoperitoneum has declined due to advancement in resuscitative, anaesthetic and operative techniques. However inspite of this, fetal mortality has remained constant at a rate of 31%. Fetal outcome is determined by the degree of prematurity and severity of haemoperitoneum, and also delay in the diagnosis of the condition, and delay in the presentation of the patient. Hence, a high index of suspicion is essential for early diagnosis and prompt treatment.

References:
