



Intrapartum spontaneous intraperitoneal haemorrhage: A case report

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Background

Spontaneous hemoperitoneum in pregnancy (SHiP) is a rare condition with significant maternal morbidity and perinatal mortality. Historically SHiP was associated with high maternal mortality however the outcome in recent case series has seen significant reduction in maternal mortality. SHiP can occur during any part of pregnancy including postpartum period. However, it commonly occurs during the second and third trimester. Exact etiology of the condition is yet to be determined.

Introduction

This is a case of intrapartum SHiP detected during emergency caesarean section

Case Report

A 24 year old woman at 38 weeks presented in early labour. This was her second pregnancy and her first pregnancy was low risk and she had an uncomplicated vaginal birth at term. This pregnancy was low risk at booking and uncomplicated antenatally.

During active first stage of labour noted to develop acute breathlessness without chest pain. She was tachypneic and tachycardic. ECG revealed pregnancy related changes. CTG was commenced and normal. Breathlessness gradually subsided. Labour augmented with oxytocin as contractions were suboptimal. Two hours later CTG trace was pathological requiring a category 1 caesarian section.

A Pfannenstiel incision was placed and up on entering in to the peritoneal cavity gross haemoperitoneum was noted. Haemoperitoneum was partially evacuated and caeserian section was resumed to deliver the fetus. Baby boy was delivered with APGAR score of 7, 10 and 10 at 0, 5 and 10 minutes respectively. Cord gases was not checked as facilitie was not available. Uterus was exteriorized and uterine incision was closed in two layers. Rest of the haemoperitoneum was evacuated and pelvis was carefully surveyed. There was no evidence of pelvic endometriosis, both ovaries and tubes were macroscopically normal. Ovarian, uterine and pelvic vessels were normal. Surgical team decided to explore the upper abdomen hence midline skin incision was placed. Completed abdominal survey including gastric, splenic, heptic and great vessels was performed and no bleeding site was identified. Peritoneal cavity lavarged and checked for reappearance of bleeding. Intraperitoneal drain was inserted. Total haemoperitonum was estimated to be 1800ml. She received 2 units of red cell concentrate intra-operatively. Patient was haemodynamically stable in the immediate recovery period and was transferred to level 1 critical care setting for observation.

Post-operative hemoglobin level was 96mg/dl. She had a complete recovery and was discharged on fourth post-operative day. She was reviewed at 1 and 4 weeks post partum. Patient advised regarding possibility of recurrence in the future pregnancy.

Discussion

Over the last century maternal mortality related to SHiP has drastically come down from 76% in 1904 to none in a case series. However the perinatal mortality has been persistently around 30%. Majority of the SHiP occurs during the latter half of the pregnancy but can occur anytime. Common among nulliparous women and commonly presented with acute abdominal pain and hypovoluemia and fetal distress. Some familiar causes of intraperitoneal bleeding in late pregnancy are uterine rupture, bleeding from ruptured ovarian cyst, placenta percreta and hepatic rupture in HELLP syndrome. The pathophysiology of above conditions are well understood. However compared to above conditions pathophysiology of SHiP is still being debated. Due to its association with endometriosis it has been suggested that the bleeding is secondary to endometriosis associated changes in pelvic organs and blood vessels. Origin of bleeding can be from any pelvic organ and sometimes from upper abdominal vessels. There is a tendency towards recurrence in same pregnancy or in future with SHiP. Diagnosis can be challenging as imaging may not be conclusive.

Conclusion

SHiP is a rare condition, however with early detection and multidisciplinary intervention can lead to favourable maternal and neonatal outcome.