



Case of spontaneous splenic rupture in pregnancy

A second look diagnosis



Dr Beenish Maqsood, Dr Taher El Neil, Dr Samira Akhtar, Dr Amina Butt
(Dr Sulaiman Alhabib Hospital, Riyadh, Saudi Arabia)

Objective: We report a case of spontaneous splenic rupture in a pregnant woman. Spontaneous rupture of spleen is rare [1] The diagnosis is often missed in pregnancy in absence of any antecedent trauma. Delay in diagnosis can lead to catastrophic consequences.

Case report: 39-year-old, Para2, previous two Caesarean sections, came to our emergency department at 31 weeks of gestation with left flank pain and features of hypovolemic shock. Her hemoglobin was 10.2. Ultrasound scan revealed fetal demise.

After a rigorous resuscitation, laparotomy was performed. Haemoperitoneum (~3litres) was found, and a small tear was noticed in the lower uterine segment. Dead baby was delivered. Following abdominal closure, patient continued to deteriorate with a drop in haemoglobin level and progressive abdominal distension. This called for a repeat exploration of abdomen. Splenic rupture was identified as a source of bleeding. Total splenectomy was performed. Meanwhile, consumptive coagulopathy was identified and treated. 17 units of packed red blood cells along with other blood products were given to the patient.

She made a remarkable postoperative recovery. Histopathology showed parenchymal congestion of spleen with a focal capsular laceration

Discussion: Splenic rupture in pregnancy is speculated to be because of :

- ☐ hypervolemic state
- ☐ splenic enlargement
- ☐ diminished peritoneal cavity volume due to enlarged uterus
- ☐ changes in spleen due to circulating hormones

The problem is the late diagnosis. The clinical state mimics other pregnancy-related events, like uterine rupture and abruptio placentae. It often occurs in multiple pregnancies, older age groups and the third trimester of pregnancy or puerperium. Diagnosis can be further complicated by delayed haemorrhage and its recognition. Maternal death can occur due to consumptive coagulopathy following massive haemorrhage. Haemodynamic decompensation in mother leads to an abrupt fall in uteroplacental perfusion that might lead to fetal demise.[1]

Conclusion: Splenic rupture should be considered as a possibility in case of pain abdomen and suspected haemoperitoneum in pregnancy. Emergent laparotomy and splenectomy can prevent both fetal and maternal mortality.