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CASE REPORT

Spontaneous Rupture of Spleen During Pregnancy

Dave Anupama · Dhand Hema · Mujalde Anshu

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Introduction

Spleen is a friable and vascular organ. If the spleen is diseased or enlarged, minor trauma [1] may result in significant bleeding. Spontaneous (atraumatic) rupture of spleen is an uncommon, but important clinical entity. The first description of splenic rupture in pregnancy was given by Lieberman [2].

"Splenic emergency syndrome" during pregnancy is characterized by the onset of severe pain in left hypochondrium or epigastrium, followed shortly by haemorrhagic shock. There is an increased risk in multiparous women. The diagnosis is often missed due to the absence of any history of trauma and delay in diagnosis can lead to catastrophic consequences (Fig. 1).

The purpose of this article is to identify the features of atraumatic rupture of spleen in pregnancy and to enhance awareness of this unusual condition.

Case Report

A 25 year old female, G4P1A2 with history of previous cesarean section reported with complaints of amenorrhoea since 8 ½ months and pain in abdomen since 1 day. On examination, general condition was fair, temperature was 37.2 °C, arterial tension was 130/80 mm Hg and pulse was 110/min, P/A–34 weeks, presentation cephalic, FHS were regular–150/min, uterus was tonically contracted patient was anaemic.

A complete blood count showed: Hb—6.5 gm %, TLC—14,000/cumm, PMN—62 %, lymphocytes—32 %, monocytes—03 %, platelet count—21,000/cumm. Her RFT, BT, CT, PT were within normal limits.

She was hospitalized with the diagnosis of abruptio placentae with severe anemia with thrombocytopenia, and received one blood transfusion.

In the mean time there was fetal distress, hence an operative intervention was done. On opening the peritoneal cavity, about 2 L of blood was collected from peritoneal cavity. A LSCS was then performed and a fresh, stillborn female baby was extracted. There were no retroplacental clots. On further abdomen exploration, the spleen was enlarged and was bleeding profusely and hence a splenectomy was done.

A band of adhesion was present anterior to spleen which was cut and ligated. The intestines were explored. Patient received three blood transfusion intraoperative, three blood transfusion postoperatively; two bags platelet rich plasma. Patient received higher antibiotics, pneumococcal and *H. influenzae* vaccine. Postoperative period was uneventful and the patients was discharged on the ninth postoperative day.

Histopathology Report—showed fibrocongestive splenomegaly with presence of γ Gandy bodies.

Dave A. (✉), Associate Professor ·
Dhand H., Professor · Mujalde A., Third Year Resident
Department of Obstetrics and Gynaecology, M. G. M. Medical College and M. Y. Hospital, Indore 452-001, M. P., India
e-mail: arvinddave10@yahoo.co.in

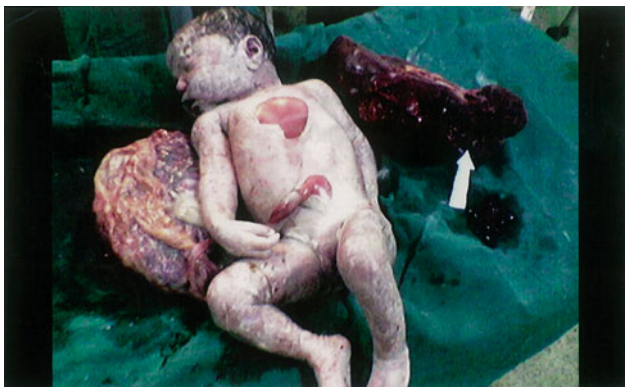

Fig. 1 Stillborn fetus and enlarged spleen which had ruptured

Follow-up

She was suspected to be a case of thalassemia—minor. So, Hb electrophoresis was done which was normal.

Discussion

Spontaneous rupture of spleen without antecedent trauma is a rare condition. Splenic rupture in pregnancy is attributed to hypervolemic state, splenic enlargement, diminished peritoneal cavity volume [1] due to enlarged uterus and muscular contractions during pregnancy. Most of these cases occur in third trimester or in puerperium [3, 4].

The basic problem of splenic rupture in pregnancy in its late diagnosis. It is commonly mistaken for ectopic pregnancy, rupture of the uterus or abruption of placenta. One of the reasons for the complicated diagnosis is the unclear etiology of rupture itself. Splenic ruptures in pregnancy often occur in multiple pregnancies, in older age groups and in the third trimester of pregnancy. Diagnosis can be further complicated by delayed haemorrhage and its recognition.

Conclusions

During the examination of pregnant women, we must also keep in mind possibility of splenic rupture. Though this is a rare occurrence, failure to recognize it is common, and can be fatal for both mother and child. With all our highly developed diagnostic methods and equipment, the aetiology of splenic rupture in pregnancy remains a dilemma for clinicians, pathologists and forensic experts.

References

1. Zinner MJ (ed). The Spleen. In: Maingot's abdominal operations. Connecticut: Appliction and Lange; 1997. p. 2036–2037.
2. Lieberman ME, Levitt MA. Spontaneous rupture of the spleen: a case report and literature review. Am J Emerg Med. 1989;7:28–31.
3. De Graaff J, Pijpers PM. Spontaneous rupture of the spleen in third trimester of pregnancy. Report of a case and review of the literature. Eur J Obstet Gynaecol Reprod Biol. 1987;25:243–7.
4. Mehmet H, Muge H, Nese G, et al. Postpartum spontaneous splenic rupture: a case report. J Turk Ger Gynaecol Assoc. 2004; 5(2):153–5.