




## When the spleen meets the fetus


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CASE REPORT

## When the spleen meets the fetus

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### Abstract

Patient's first pregnancy was complicated by mild thrombocytopenia caused by a 13-cm splenic cyst, who delivered vaginally without complication. Risks and management of maternal splenic cysts in pregnancy and delivery are reviewed here.

### Keywords

Pseudocyst, splenic cyst, thrombocytopenia

### History

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### Case notes

A 26 years-old primigravida female patient was admitted to the Department of Obstetrics and Gynecology, University Hospital of Lausanne for a follow-up of her first pregnancy. She had no significant past medical history and denied any previous trauma. Her first trimester routine blood tests were within the normal range, except for an isolated thrombocytopenia (nadir 60 G/l). Given the patient's abnormal blood count, she underwent multiple investigations, including hematological assessment, which ruled out autoimmune or viral etiologies as well as microangiopathy.

Clinical examination revealed a palpable mass in the upper left abdominal quadrant, confirmed by an abdominal ultrasound, which showed a 13 × 11 cm intra-splenic cystic lesion. An abdominal MRI confirmed a splenic epidermoid cyst (Figure 1A). The diagnosis of thrombocytopenia in the context of hypersplenism was highlighted. A parasitic etiology caused by *Echinococcus* has been ruled out considering the absence of IgG antibodies.

After multidisciplinary counseling including the GI surgeons, the theoretical risk of spontaneous rupture was estimated to be extremely low during the pregnancy as well as the delivery. Indeed, the patient remained asymptomatic throughout the pregnancy. Iterative radiological controls showed that the splenic cyst was stable in terms of size. Blood test confirmed a stable moderate thrombocytopenia. Obstetrical monitoring during the whole pregnancy was normal, including fetal growth. After spontaneous onset of

labor, the patient finally delivered vaginally at term without any complications. The patient and her baby were discharged at day 4 post-delivery. Due to the patient's persistent thrombocytopenia 6 months post-partum, a splenectomy was performed (Figure 1B). Pathology investigation showed a 1.6 kg spleen with a 14 cm pseudocyst (Figure 1B).

### Conclusion

Little is known about splenic cysts during pregnancy and only 9 cases have been reported so far [1,2]. None of the previously published cases have agreed for a formal recommendation, thus consensus for the management of pregnant patients with splenic cysts is therefore yet to be established. A prophylactic intervention during pregnancy (cystectomy, splenectomy, radiological guided drainage of the cyst) has been recommended by several authors to avoid the theoretical risk of splenic rupture [1–7].

However, the risks between the extremely rare spontaneous ruptures and intervention during pregnancy should also be weighed. First, the etiologies of these cysts are classified mainly as congenital and post-traumatic, while infectious or neoplastic causes are rare [8]. Most of them are incidental findings in asymptomatic patients and are present years before pregnancy [9]. The risk of spontaneous rupture is considered extremely low. In a large systematic review of 613 splenic ruptures, 22 (3.6%) occurred during pregnancy but none of them involved splenic cysts [10]. Secondly, intervention during pregnancy might be complicated by sepsis, major bleeding, recurrence and preterm labour [2,3,8].

In the case of stable splenic cysts during pregnancy, we believe that expectant management should be considered, thus cesarean section performed only for obstetrical reasons [11].

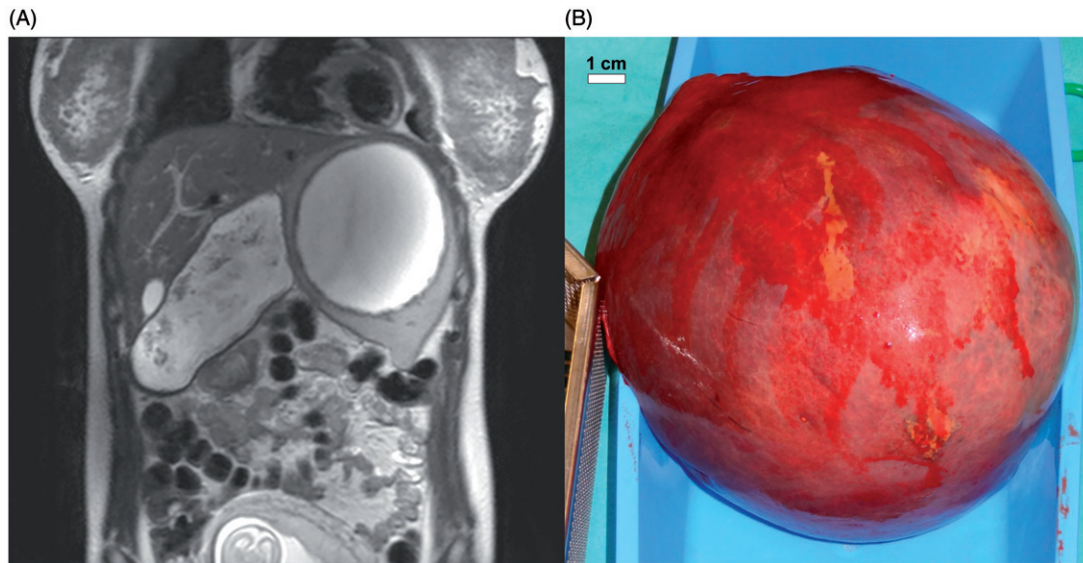


Figure 1. (A) MRI scan showing the splenic cyst with gravid uterus at the end of the first trimester of pregnancy. (B) Splenectomy at 6 months postpartum.

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### Declaration of interest

The authors report no conflict of interest.

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