

Partial splenectomy for a large splenic cyst

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ABSTRACT

A 28-year-old lady with a long history of pain at left subcostal margin, referred by the gynecologist after her ultrasound showed an incidental splenic cyst while she was being investigated for a gynecological complaint.

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Splenectomy has morbidity in terms of increased susceptibility to postoperative sepsis as well as the need for life long antibiotic therapy. To avoid this we advocate partial splenectomy for splenic cyst, unless the cyst is very large or presents acutely with rupture and bleeding.¹

Case Report. A 28-year-old lady was referred to our surgical out patient clinic with a history of pain at the left subcostal margin for many years. She was under investigation for a gynecological complaint and her ultrasound (US) had shown an incidental splenic cyst of 7.8 x 6.5 x 6.0 cm. She denied any history of trauma. A computerized tomography scan was arranged and reported as showing a well defined cystic lesion in the posterior aspect of the spleen extending for approximately 8 cms, with evidence of strands of solid elements at the periphery of the lesion. The appearance suggested that it was probably a post-traumatic cyst (**Figure 1**). The patient was given pneumovaccine when she was seen in the preadmission clinic. At laparotomy, the cyst was identified and dissection at the splenic hilum showed that the lower part of the spleen was supplied by a separate vessel. After mobilization of the spleen and clamping of the splenic vessels, supplying

the middle and lower parts of the spleen, a clear demarcation between the ischemic and well-perfused parts of the spleen was evident. Partial splenectomy was carried out and the cut edge of the remaining spleen sutured with interrupted mattress suture using a 30 vicryle with surgical enforcement between the stitches to avoid cutting through the capsule of the remaining splenic tissue (**Figure 2**). The histology of the cyst conformed it was a benign cyst (false cyst) (**Figure 3**). Postoperative US scan 6 months later confirmed the presence of a 6.3 cm splenic remnant. Her blood did not show any holly jolly bodies, while her platelets initially increased to $720 \times 10^9/L$ they returned to normal after one month.

Discussion. The majority of splenic cysts occur as a result of parasitic infection, most commonly in countries where hydatid disease is endemic. In the Western world however, their occurrence is extremely rare and etiology is less clear. Approximately 800 cases of non-parasitic splenic cysts have been reported in the world literature to date. Their presentation ranges from that of an incidental finding on abdominal examination to catastrophic intraperitoneal hemorrhage.² Although our patient had no history of trauma the histological

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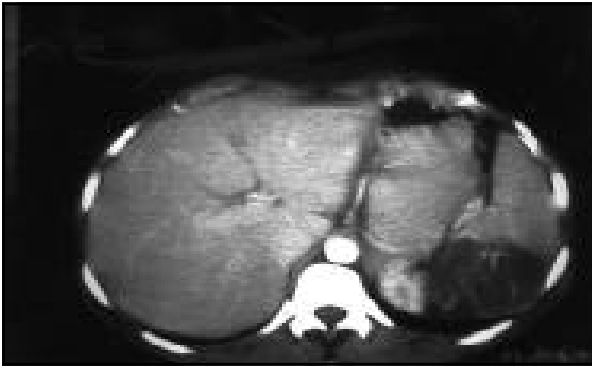


Figure 1

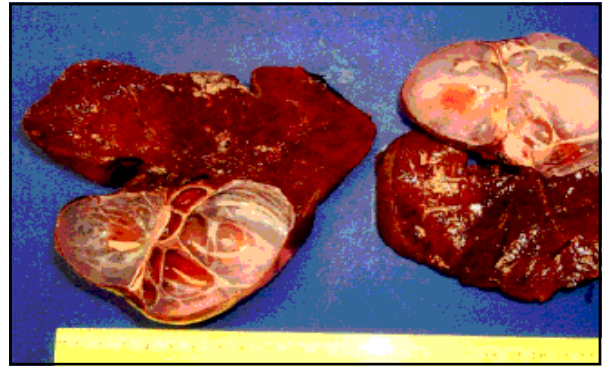


Figure 2

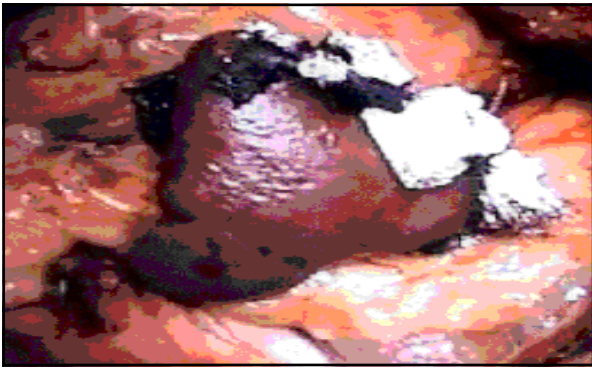


Figure 3

Figure 1 - Computerized tomography scan showing the splenic cyst.

Figure 2 - Splenic cyst opened.

Figure 3 - Partial splenectomy.

picture was consistent with a post-traumatic false cyst and we feel this patient may have had minor trauma, which was unnoticed. These cysts have been managed such as primary splenic cysts with a total or partial splenectomy or marsupialization.^{3,4} Accurate preoperative diagnosis and localization together with increasing awareness of splenic conservation techniques should now ensure that, whenever possible, cysts can be eradicated without resort to total splenectomy.⁵ Hemisplenectomy is based on accurate dissection of the splenic hilum with clear knowledge of the intracapsular vascular anatomy of the spleen. Preoperative vaccination is recommended in the event that splenectomy is required.⁶

In conclusion, our patient had partial splenectomy, which spared her life-long antibiotics, which should always be performed when feasible.

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