
A CASE REPORT : SPLENIC EPIDERMOID CYST.

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ABSTRACT

We reported a splenic epidermoid cyst who underwent a total splenectomy. The ultrasonography and computed tomography scans are the imaging tools to establish the diagnosis by demonstrating a cystic lesion with occasional septations, wall trabeculation and internal contents. There is no specific imaging characteristic to distinguish between the true and false cyst. The certain diagnosis should be made by histological prove. Anyhow, when the splenic cyst is found, the patient should be treated owing to the risk of rupture, or on top infection.

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Cystic lesions of the spleen can be divided into four categories: infectious cysts, post-traumatic cysts, primary congenital cysts and intrasplenic pancreatic pseudocysts⁽¹⁾. Splenic cysts are commonly pseudocysts following old hematoma or infarcts. Less common cysts are primary congenital cysts such as epidermoid cysts or infectious cysts such as hydratid cysts. All types, but especially the latter two, may show marginal calcification⁽²⁾. We described a case of splenic epidermoid cysts; an unusual form of the splenic cysts.

CASE REPORT

A 24 year-old Thai man presented with sudden onset of severe left upper quadrant pain referring to the left shoulder. He had no previous history of trauma in this area. He has suffered from this symptom on and off for one year. The blood laboratory findings including CBC, renal and liver function tests were normal. The spleen was palpated 4 cm. below costal margin. Abdominal sonography showed an echo free area with echo

enhancement deep to the lesion occupying in the spleen, having smooth sharp border and oval shape about 12.2 x 8.7 cm² in size (fig. 1). Normal liver, pancreas and both kidneys were noted. Computed tomography scan revealed a large cyst in the spleen with partial rim calcification (fig. 2). Explore lab was done after complete investigation with diagnosis of impending rupture of the splenic cyst. At operation, the huge spleen was found measuring 15 x 12 x 10 cm³ in size occupied by a big cyst at its superior portion. Moderate degree of adhesion over posterior and hilar areas were noted. The patient underwent a total splenectomy. The pathological diagnosis was epidermal cyst of the spleen. Microscopic examination revealed the cyst wall lining by squamous epithelium with intercellular bridges and acidophilic amorphous material content.

DISCUSSION

The true cysts are rare found mainly in people under 20 years of age called epidermoid, epithelial or congenital cysts. False or pseudocysts usually occur after trauma, infarction or parasitic infection. Abdominal ultrasound and CT scan are very useful imaging tools to obtain the pre-operative diagnosis but the reliable radiologic distinction

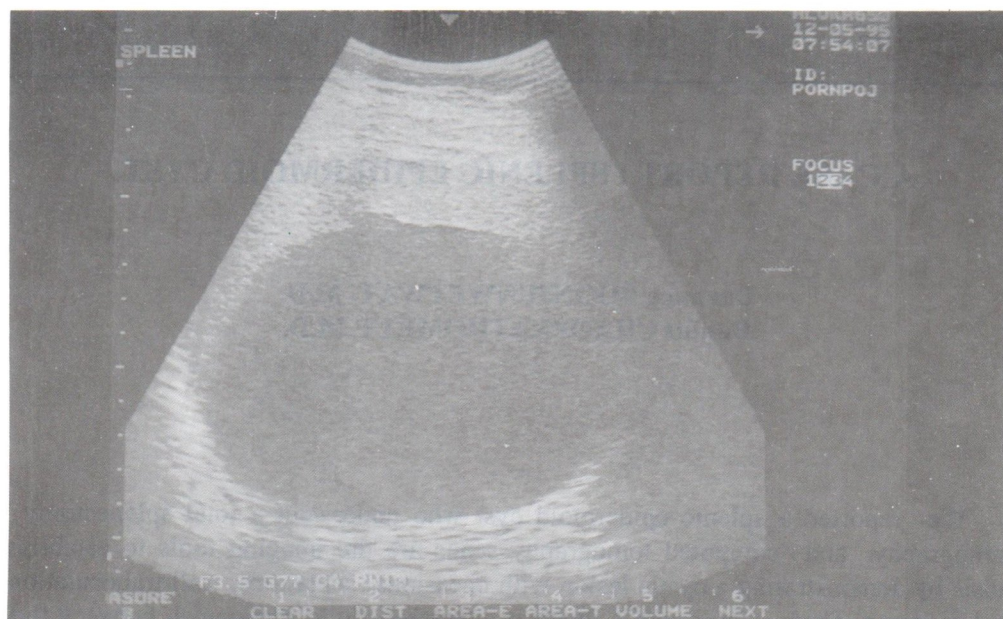


Fig. 1. Abdominal sonography showed an echo-free area with smooth, sharp border and enhancement of the echoes deep to the lesion occupying in the spleen about 12.2 x 8.7 cm².

between true and false splenic cyst does not seem possible⁽³⁾. The peak incidence of the splenic epidermoid cyst is in the second and third decades⁽⁴⁾.

Basically true cysts containing an epithelial lining thought to originate from an abnormality in the development of the spleen during the seventh week of the embryological life when the spleen is close to the mesonephric tissue⁽⁵⁾. Others possible causes of true splenic cysts include infolding of peritoneal mesothelium after rupture of the splenic capsule, aggregation of peritoneal mesothelial cells trapped in splenic sulci or dilatation of normal lymphatic spaces⁽⁶⁾.

Abnormal findings on plain film may consist of splenomegaly with rim calcifications. On radionuclide studies the splenic cyst is seen as a well-defined photon-deficient area (cold lesion), but these findings are nonspecific, as an abscess or hematoma may assume a similar appearance⁽⁷⁾. Ultrasonography of the splenic cysts characteristically appear as echo-free areas with smooth, sharp borders and enhancement of the echoes deep to the lesions⁽¹⁾. CT scan of the splenic cysts appear as thin-walled, unilocular, rounded, or oval intrasplenic masses of water density and typically display no contrast enhancement. Cyst wall trabeculation and septation may occur in either true or false cyst, but rim calcification is more common in false cysts. Debris or high-density material may be noted within either true or false cyst secondary to intracystic hemorrhage or in the case of false cyst residua of resolving hematoma⁽⁶⁾. MRI of the splenic cysts show the

simple cyst as a low signal mass on T1-weighted scans that have a bright signal on T2-weighted scans⁽⁸⁾.

The differential diagnosis of non parasitic splenic cysts, which less common than traumatic pseudocysts, include hemangiomas, dermoids, lymphangiomas and, as in the present case, epidermoid variants⁽⁹⁾. The complication of the splenic epidermoid cysts are rupture and causing acute peritonitis^(10,11). The other is infection such as salmonella⁽¹¹⁾. Epidermoid cyst in the intrapancreatic accessory spleen lined by squamous epithelium has been reported^(12,13).

partial splenectomy is the treatment of choice of the splenic epidermoid cyst^(14,15,16,17) or another benign cystic tumor because of the risk of post splenectomy sepsis. Another treatment procedures are drainage and deroofting⁽⁵⁾, partial splenic decapsulation⁽¹⁸⁾, percutaneous aspiration and tetracycline sclerosis⁽¹⁹⁾, marsupialization⁽⁹⁾.

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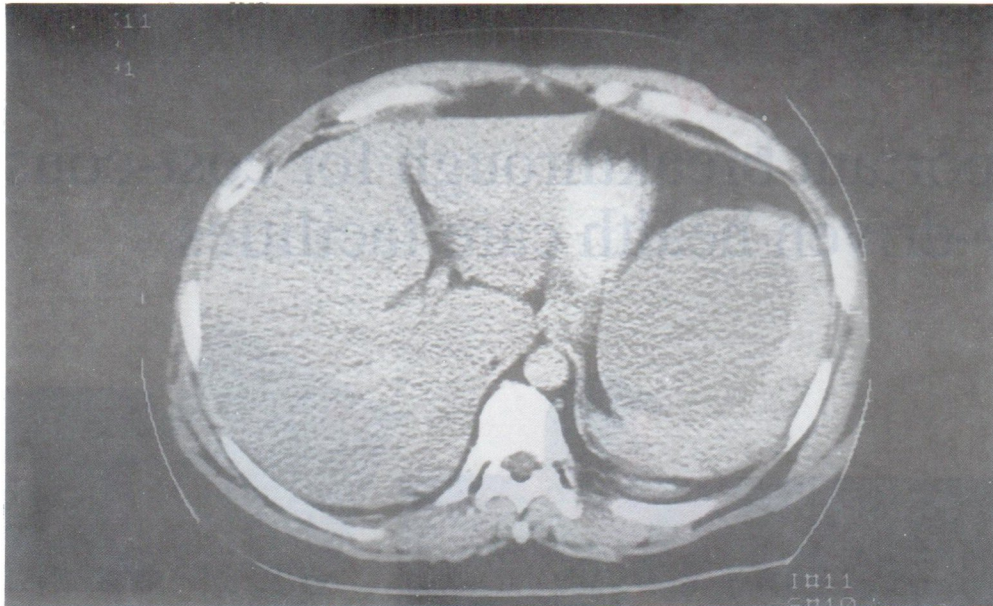


Fig. 2. Computed tomography scan revealed a large cyst in the spleen with partial rim calcification.

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