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CALCIFIED PSEUDOCYST OF SPLEEN: A CASE REPORT

General Surgery

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ABSTRACT

Cysts of spleen are rare encounter in clinical practice and could be true or false depending up on the presence of epithelial lining. They are usually asymptomatic and are result of infection, trauma or infarction. We present a case of non-traumatic pseudocyst of spleen in an elderly female, where the patient presented with dull ache in left side of upper abdomen. The cyst was removed successfully via left subcostal incision.

KEYWORDS

Spleen, Pseudocyst, Trauma

INTRODUCTION

Masses in spleen are very rare and are of varied etiology. They could be benign, neoplastic or infectious. McClusky et al reviewed the spleen in their seminal two-part review (1). Usual complaints are left upper abdominal pain or vague discomfort; but more often they are asymptomatic and discovered incidentally on imaging for other purposes. Pseudocysts are non-parasitic and thought to arise as a consequence of trauma, although many do not remember a specific event. About 800 cases have been reported in literature (2) and on further search eight more cases were identified as reported in last decade.

Case Report

A 58 years old lady presented with dragging pain in left upper quadrant of abdomen for about 8 months. The pain was mild, aggravated on ambulation and relieved by itself. She also noticed an abdominal lump for 2 months. She had no history of fever, weight loss, trauma, anorexia or early satiety. On examination she was of average built. Her vitals were normal. On examination of abdomen there was no obvious fullness or distension. An intra-abdominal, intra-peritoneal round lump, firm in consistency was felt in left hypochondrium extending to left lumbar region. It moved with breaths but upper pole could not be reached. It was neither ballotable nor palpable on bimanual examination. Spleen was not palpable but dullness was noted in Traube's space. No generalised lymphadenopathy was present and other systems were unremarkable.

Her complete blood count, liver function tests and chemistries were normal. CECT revealed a 15 x 10 x 8 cm well defined, non-enhancing lesion with peripheral calcification, which had mixed density contents with few calcifications within. Postero-medially abuts the spleen with loss of fat planes, whereas the planes with stomach, pancreas, splenic flexure and descending colon were well maintained. There was no lymphadenopathy or ascites (Fig 1). The diagnosis suggested was likely of hydatid cyst however serology for anti-Echinococcus antibodies (IgG) was negative.

Fig 1. Large calcified cyst on anterior surface of spleen extending up to diaphragm

She was taken up for exploratory laparotomy and excision under general plus epidural anesthesia with presumption of dead hydatid cyst. Intra-operatively, there was a large thick walled white cyst on the antero-medial aspect of spleen and densely adhered to it (Fig 2). It contained white putaceous material. It was decided to remove the cyst along with the spleen (Fig 3). Dissection from the inferior aspect of left hemi-diaphragm was most difficult. Otherwise the cyst was avascular.

Fig 2. Intra-op photograph of cyst densely stuck to spleen

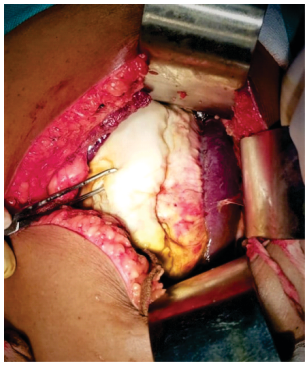
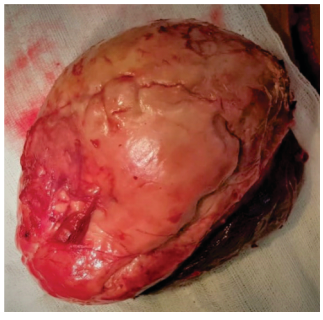


Fig 3. The resected specimen showing a well-defined thick walled cyst arising from spleen.



The pathological examination revealed a 750 gm cyst measuring 15x10x6 cm with no continuation noted between the cyst and the spleen. Cyst wall was calcified and contained friable chalky white cheesy material. Microscopically cyst wall showed dense fibrous tissue without an epithelial lining and the content as acellular material. Spleen showed normal histology with congestion (Fig 4 & 5).

Fig 4. High magnification view of cyst wall showing dense fibrous tissue without epithelial lining.

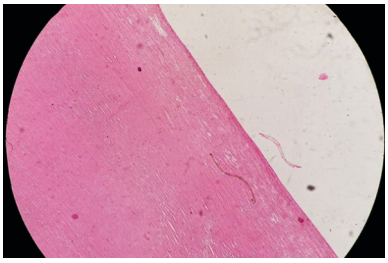
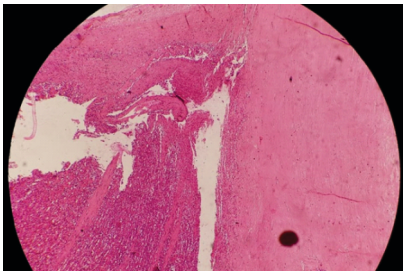


Fig 5. High magnification view of cyst wall with spleen.



Post-operatively patient recovered well, except for the SSI which developed a week later on lateral end of wound. It was managed conservatively. The patient was immunized against *H influenzae, N meningitidis* and *S pneumoniae* before discharge from the hospital.

DISCUSSION

The cysts of the spleen are classified in two broad categories as either true cyst containing an epithelial lining or pseudocyst which lack an epithelial lining. The true cysts can be parasitic or non-parasitic in origin, whereas pseudocysts are usually the result of trauma (3). Almost 30% of patients do not recall any traumatic event (4), thereby suggesting other causes as infarction or infection. They typically occur in young and middle aged persons with women being more affected than men. The pathogenesis is thought to be of encapsulation of hematoma, with subsequent absorption of blood and persistence of false cyst wall (5). It is difficult to differentiate true cysts from pseudocysts on a clinical basis due to similar complaints, age group and frequent absence of a history of trauma.

The pseudocyst may be an incidental finding on imaging with calcification as hallmark on radiography. Use of USG and CT scan reveal their cystic nature. The treatment approach is common with observation for cysts less than 5 cm with serial imaging and surgery for the larger ones. Many procedures have been employed with splenectomy remaining the surgery of choice (6), others being partial splenectomy, marsupialisation and aspiration.

CONCLUSION

The pseudocyst of spleen is an uncommon surgical pathology with no clear etiology identified in many patients. It may be discovered incidentally for unrelated symptoms or present as pain and lump. The investigation of choice remains CECT but the confirmatory diagnosis is only made on pathological examination. Treatment of choice remains splenectomy, however spleen preserving procedures have been attempted.

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