Pseudocyst Spleen: Case Report

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Abstract: Pseudocysts of the spleen are very rare. It is found in <1% of the splenectomies done, usually develop secondary to trauma. Pseudocysts of spleen with large size are rare and most of these remain asymptomatic. They require exploration only in symptomatic cases and chances for preservation of spleen in these cases are usually less. Here, we present a case of this rare entity with complain of pain in the abdomen. After thorough investigations, laparotomy was done doing splenectomy in the case. Histopathological examination revealed the absence of lining epithelium that confirmed the diagnosis of splenic pseudocysts. We report this case because of their rarity and as diagnostic dilemmas. In this part of the world Echinococcal cysts are found to be common cause of cystic lesions. Pre-operatively it is difficult to differentiate pseudocysts of the spleen from other types of cysts.

Keywords: Pseudocyst, Spleen, Trauma, Splenectomy.

INTRODUCTION

In routine surgical practice cystic swelling of the spleen is an uncommon disease [1]. Cystic lesions of the spleen include benign cysts, neoplasms and abcesses [2]. Cysts of the spleen can be classified as parasitic and non-parasitic [3-5]. Non-parasitic cysts divided as true cysts (primary) and pseudocysts (secondary). True cysts are lined by epithelial cover and include epidermoid cyst, epithelial or congenital cysts. In pseudocysts epithelial lining is absent and mostly are post-traumatic [5-7].

The diagnosis of splenic cysts have increased now a days, because the availability of computed tomography (CT) and due to the conservative management of splenic injuries [8]. Splenic conservation are used rather than splenectomy which was practiced for splenic pseudocyst. Splenic conservation procedures for splenics pseudocysts are deroofing of the pseudocyst and partial splenectomy. Splenectomy is required in large pseudocysts that involve the splenic hilum and ruptured pseudocyst [9]. For the proper management it is important to distinguish pseudocyst of spleen from hydatid cysts. Splenic pseudocysts mostly remain asymptomatic and they require treatment only when become symptomatic. In general, large cysts produce symptoms an treatment is done surgically by splenectomy or by splenic preservation [10].

CASE REPORT

A 35-year old male presented in outpatient department of general surgery at SMS Hospital with complain of dull ache and sensation of heaviness in the left hypochondrium for 20 days without any other complain. His physical examination revealed splenomegaly. Past history was negative for any trauma, malaria or any hematological disorder.

All routine investigations were in normal limits. Serological tests for malaria and Echinococcus were negative. The ultrasound examination showed a large, solitary, cystic lesion 70×70mm of the spleen. The patient was scheduled for CECT of the upper abdomen which revealed a solitary, smooth outlined splenic cyst, with signs of peripheral calcification. The cyst was occupying almost the entire splenic parenchyma and was 60×72×72mm in size likely calcified epidermoid or hydatid cyst (Fig. 1&2).

A surgery was planned considering the diagnosis of splenic cyst and abdomen was explored per operative finding showed large cystic lesion of spleen 7×8 cm occupy whole of the spleen thus complete splenectomy was done (Fig. 3, 4). Other solid organ and visceras was normal. On follow up the histopathological examination confirmed the diagnosis of pseudocyst by the absence of lining epithelium.

Fig. 1&2: CECT abdomen showing well defined non enhancing homogenous cystic lesion 72×72×60 mm size with peripheral calcification in spleen likely calcified epidermoid or hydatid cyst

Fig. 3: Intraoperative picture of splenic cyst involving whole of the spleen

Fig. 4: Intraoperative picture of splenic cyst involving splenic hilum and rest of spleen showing congestion

Fig. 5: Specimen of splenic cyst

Fig. 6: Aspirated clear brown fluid from the splenic cyst

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DISCUSSION

Splenic cysts are rare with around 800 cases have been reported in literature [11]. Pseudocyst mostly developed due to splenic trauma and results from splenic haematoma managed conservatively [12]. Capsule of fibrous tissue that develops around the resolved subcapsular or intraparenchymal haematoma liquefies to form pseudocyst [13]. In the present case the cyst is probably the result of unrecognized trauma. Resolution and liquefaction of hemorhoma of remote or recent trauma is thought to be instrumental in the origin of pseudocysts of the spleen, but also may be infectious or of degenerative origin also [14-16].

It is reported that hydatid disease as the most common cause of splenic cysts in this country. An infected hydatid cyst is difficult to differentiate from other types of cysts. Patients with small splenic cysts are mostly asymptomatic or have minor non-specific symptoms and ultrasound abdomen easily makes the diagnosis [1].

Large cysts cause atypical pain and heaviness in the left hypochondrium because of capsular distension or they may present as palpable mass [1, 17, 18]. Other symptoms secondary to pressure on surrounding organs like stomach include nausea, vomiting etc. Pressure in the cardio-respiratory system may cause pain or dyspnea and persistent cough. Occasional complications include infection, rupture or hemorrhage [1].

Surgery is primarily recommended for the prevention or treatment of complications of pseudocysts such as infection, hemorrhage or rupture, which may be life-threatening [14-16]. For many years, splenectomy has been the treatment of choice for splenic pseudocysts. Surgical approaches depend on the size of the cyst, the condition of splenic parenchyma and the anatomic proximity of the cyst. Because of better understanding of the post splenic complications, now days the attitude has become more conservative [1].

Splencetomy, partial splenectomy, aspiration, drainage, marsupialization and laparoscopic procedures are the surgical options for splenic pseudocyst [1].

In our case the cyst was large size and near the splenic hilum the parenchyma of the spleen was congested and edematous. Thus, splenectomy was considered safer.

CONCLUSION

Partial splenectomy is the recommended method for parenchymal preservation, but total splenectomy is preferred when the splenic cyst is oversized or cannot be excised with safety.

REFERENCES


