



Case Report:

Massive Splenic Pseudocysts : Report of 2 cases

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Abstract: Splenic cysts can be classified as parasitic and nonparasitic. Non parasitic cysts can be further divided into true and pseudocysts. Pseudocysts of spleen does not contain an epithelial lining. Pseudocysts of spleen are usually post traumatic and they rarely grow to a large size and most of them are asymptomatic. It can be confused with cystic lesions of spleen or pancreas or from the surrounding structures. These cases require exploration and is both diagnostic and therapeutic. Conservative measures to preserve spleen can be considered only in presence of expertise and if remnant functional splenic parenchyma is more than 25 %. Here we present two cases of giant pseudocysts who were confused with malignancy and referred to our centre and were later found to be pseudocysts of spleen. We would like to report these cases as they are rare and as diagnostic dilemmas.

Keywords: Splenic pseudocysts; Splenic cysts; Splenectomy.

Introduction

Grossly, cysts of spleen can be classified as parasitic and nonparasitic. Nonparasitic cysts can be further classified as true cysts and pseudocysts. True cysts are those with an epithelial lining and include epidermoid, epithelial or congenital cysts. Pseudocysts do not have epithelial lining and usually are posttraumatic or inflammatory or degenerative.[1] We here would like to present clinical, radiological and pathological findings of two patients with splenic pseudocysts which were idiopathic thought as malignancy, referred to our centre but finally were found to be pseudocysts. We would like to discuss these cases as diagnostic challenges.

Case 1: A 46 year old male presented with pain abdomen on left side for 2 months and mass abdomen on left side which

was insidious in onset, gradually progressive without any other associated symptoms. He was a known alcoholic and there was no history of trauma/ symptoms suggestive of bleeding diathesis. On examination there was a 20x20 cms mass in left hypochondriac region extending to epigastric, umbilical and left lumbar region. Ultrasonography of abdomen was performed which showed 17 x18.5 x21 cms sized heterogenous mass lesion in left hypochondrium and no well defined plane with spleen or stomach or tail of pancreas with displaced bowel loops. A contrast enhanced tomography was performed which showed a well defined heterogeneously hypodense soft tissue attenuating lesion in the region of body and tail measuring 16.9x12x18 cms with peripheral enhancement and few specks of amorphous calcification (Fig.1). The fat planes with spleen and kidney were indistinct and stomach was pushed anteriorly. Liver was normal and there was no free fluid. With a diagnosis of cystic neoplasm of pancreas or retroperitoneal tumor a fine needle aspiration cytology was performed which showed spindle cells in a hemorrhagic background. Explorative laparotomy was performed which showed an enlarged spleen of 20 x 18 x 18 cms abutting the stomach and tail of pancreas and a total splenectomy was performed (Fig.2A). Histopathology examination revealed a large splenic infarct occupying the entire spleen with normal splenic parenchyma in the subcapsular region. Five splenic hilar lymph nodes were found to be reactive. Postoperative recovery was uneventful and patient was discharged on postop day 7 after vaccinating for *Pneumococcus* and *H. influenza*.

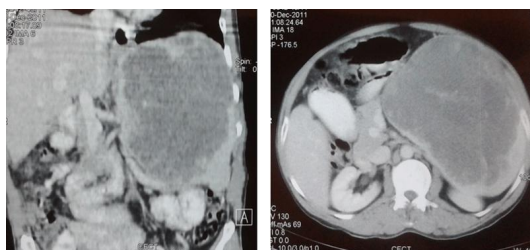


Figure 1: Contrast enhanced computer tomography scan showing a heterogeneous mass near spleen, and the body and tail of the pancreas



Figure 2A (left) Intraoperative photograph of spleen and Fig 2B: Splenectomy specimen

Case 2: A 60 year old male presented with dull aching pain on left side of abdomen with referred pain to left shoulder for 4 months with no other associated symptoms. There is no history of trauma. Patient is a known alcoholic and smoker. On examination there was a mass of 6x5 cms in left hypochondrium and umbilical region. No other significant lymphadenopathy. Ultrasonography abdomen revealed 6.8 x 5.9 cms well defined thick wall cyst in the region of spleen and left upper pole of kidney with mild internal echoes. Rest of the abdominal organs were normal. A contrast enhanced computer tomography revealed 6.6 x 9.8 x 8 cms well defined large cystic lesion posterior to stomach with enhanced cyst wall, abutting spleen and tail of pancreas. A fine needle aspiration cytology was attempted which showed degenerated cells in a necrotic background. Routine blood investigations, bleeding time and clotting time were normal. Explorative laparotomy was performed which showed necrotic, infarcted spleen and hence total splenectomy was performed (Fig. 2B). Histopathological examination revealed an organised blood clot. Postoperative recovery was uneventful and patient was discharged on postoperative day 6 after vaccination for Pneumococcus and *H. influenza*.

Discussion:

Non parasitic splenic cysts are rare with less than 1000 case reported in literature of which 70-80% were pseudocysts and of them most are traumatic.[2] They vary in size from 1-16 cms and usually contain dark turbid fluid. 30-60% of post traumatic cysts are asymptomatic.[3] Usually a history of trivial trauma is present. Pseudocysts can be treated conservatively if they are asymptomatic. If symptomatic various treatment modalities like laparoscopic fenestration, partial or total splenectomy can be performed.[4,5] Partial splenectomy can be considered if 25% of healthy splenic parenchyma can be preserved. In our cases where pseudocysts were massive and symptomatic, total splenectomy was the treatment of choice.

Pseudocysts with a large size, heterogeneous enhancement without history of trauma and bleeding diathesis are a diagnostic challenge preoperatively and can be confused with a varied differential diagnosis like pseudocyst/congenital cysts of spleen, cystic neoplasms of pancreas, necrotic tumors arising from spleen, etc. Many of times radiological findings may not help for the correct

diagnosis preoperatively in large pseudocysts like our case and most of these patients need exploration as diagnostic and therapeutic modality.

Conclusion: The pseudocyst may be asymptomatic or accidentally discovered or present with symptoms like mass or pain in left hypochondrium. They may be confused with cystic neoplasms of pancreas or other neoplasms from surrounding structures. Spleen conservative procedures can be performed whenever it is feasible with expertise. Percutaneous drainage is associated with significant amount of complications and laparoscopic fenestration with recurrence. Total splenectomy remains the treatment of choice if there is no enough amount of splenic parenchyma for conservation.

References:

1. Fowler RH: Non parasitic benign cysts tumor of the spleen. *Int Abst Surg* 1953;96:209-227.
2. Labruzzo C, Haritopoulos KN, El Tayar AR, Hakim NS. Posttraumatic cysts of the spleen : A case report. *Int Surg* 2002;87:152-154.
3. Urrutia M, Mergo PJ, Ros LH, Torres GM, Ros PR. Cystic masses of the spleen: Radiologic-Pathologic correlation. *Radiographics* 1996;16(1):107-29.
4. Patcher HL, Hofstetter SR, Elkowitz A, Harris L, Liang HG. Traumatic cysts of the spleen. The role of cystectomy and splenic preservation: Experience with seven consecutive patients. *J Trauma* 1993;35:430-436.
5. Jamshidi M, Chang E, Smaroff G, Mehta J, Ghani A. Laparoscopic fenestration and modified marsupialization of posttraumatic splenic cysts using a harmonic scalpel. *Surg Endosc* 2001;15(7):758.