

Huge Primary Splenic Epithelial Cyst-Case Report

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Abstract: Splenic cyst are rare. Only few cases have been reported. Mostly are hydatid cyst, epithelial cyst are very rare. Sign and symptoms are usually that of mass in abdomen. This is a case report of splenic epithelial cyst in 14 years old boy who presented with abdominal distension. Cyst with spleen removed and send for histopathology. On microscopy it has confirmed as primary epithelial cyst.

Key Words: Epithelial cyst

Introduction

Epithelial cyst of spleen are primary true cyst. Other is pseudo cyst and parasitic cyst. True epithelial cyst have lining of squamous or mesothelium like. While pseudo cyst do not have true lining, they are formed due to trauma, infarction or infection.

Case Report

A 14 years old boy presented with abdominal distension and left upper abdomen heaviness. On examination abdomen is distended and there is intra-abdominal swelling extending from left costal margin to lumbar region and up to periumbilical region.

Radiological impression on CT Scan with contrast (Figure.1) show a large water dense cyst without enhancing margin with homogenous texture seen in left abdomen pushing midline structure to right. It measured about 18.63x17.73x17.58 cm. Multiple small cyst of same character were seen in spleen. Splenic outlined was distorted due to these cyst. MRCP (Figure.2-A,B) reveal large, single encapsulated cystic lesion in left upper abdomen. There was no communication with pancreatic duct. On radiology differential diagnosis include Splenic cyst(mesenteric/peritoneal origin), Splenic hydatid cyst.

On surgery per operative findings were massive cysts in epigastrium arising from spleen seen extending from left diaphragm, displacing liver, stomach pancreas colon and kidney.

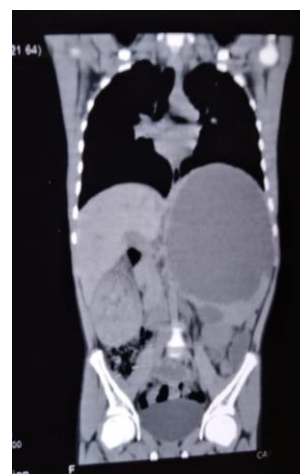


Figure 1 CT-abdomen showing a large cyst in left abdomen

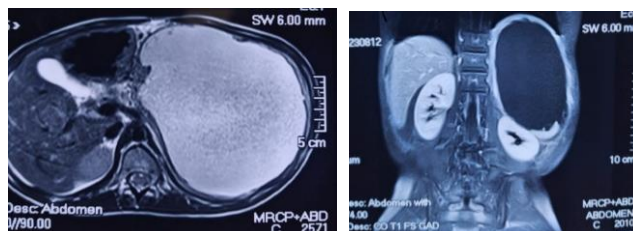


Figure 1(A,B) MRCP abdomen revealing large encapsulated cystic lesion in left upper abdomen.

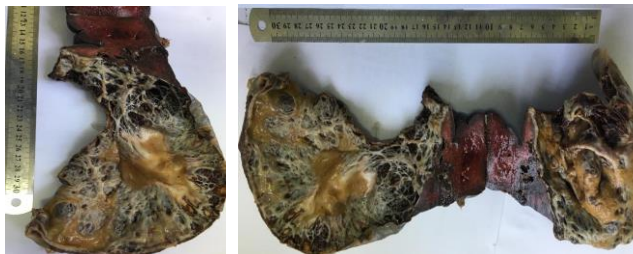


Figure 3(A,B) Gross presentation of cyst showing trabeculations

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It was adherent to stomach and left lobe of liver and left side of diaphragm. There was no communication with pancreatic tail. Splenectomy was done. Grossly spleen was enlarged and measuring 22x13x9cm, showed a huge cyst measuring 18x17x17cm. Outer surface of cyst was smooth and show patchy grey white areas. Inner surface show grayish white thick trabeculations and smooth areas.(Figure.3-A-B) Microscopy revealed cyst wall lined by flattened to cuboidal mesothelial like epithelium. The cells have bland nuclei. Beneath epithelium there is fibrous tissue focally showing chronic inflammation.(Figure-4 A-B).Adjacent splenic tissue show unremarkable splenic parenchyma.

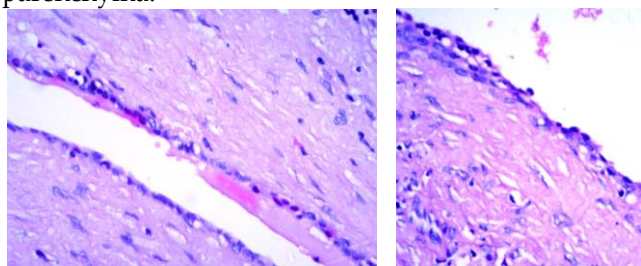


Figure 4(A,B)Microscopic section show cyst lined by simple flat to cuboidal cells. Beneath the epithelium there is fibrous stroma.

Discussion

Splenic cyst are rare.¹There are two type of cyst. Parasitic and non-parasitic. Non-parasitic further sub classify in to true and pseudo cyst. True cyst have epithelial lining and these are primary cyst. Pseudo-cyst lack proper epithelial lining and mostly due to some trauma, infarction or infection.

Epithelial cyst are usually from epithelial inclusion which formed during development from capsule of spleen or epithelium of adjacent organ.² Exact origin of this epithelium is remain unknown. Splenic epithelial cysts are usually asymptomatic, few present with heaviness and mass in left hypochondrium. These cysts may vary in size from few millimeter to 30 centimeter. Usually single and uniloculated. But multiple and multiloculated have been reported.

On histology primary cyst have lining that is either flat or cuboidal, columnar or squamous with bland nucleus. Epithelial cyst may have squamous or mesothelium like lining.² Secondary changes can occur in cysts that is inflammation, fibrosis and occasionally calcification. Cyst fluid may contain cholesterol cleft, hemorrhage and protein debris.

Clinically it is difficult to reach accurate diagnosis of primary epithelial cyst. Other technique like raise cystic fluid for CA19-9 as compare to serum can also perform.³Carmelo et all⁴ reported a case of giant splenic epithelial cyst with elevated serum marker CEA and CA19-9.

Small cyst are usually asymptomatic and do not need surgery. However large cyst need surgery. Complication which can be occur in splenic cyst are infection, perforation of cyst which lead to fatal haemoperitonium. And on very rare occasion dysplastic changes and carcinomatous transformation

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Authors' Contribution

Dr. Javeria Faridi, Senior Registrar in Pathology at ANTH & IMDC main author

Dr. Saeed Alam, Professor of Pathology at ANTH & IMDC conceived the idea, done gross and microscopy and diagnosed the case.

Dr. Ahmed Raza, Professor of Surgery at ANTH & IMDC, performed surgery and helped in providing clinical information.

Dr. Sohaib Haider, Assistant Professor of Surgery at ANTH & IMDC , assisted in surgery.

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