

Case Report

## Primary Epithelial Cyst of Spleen - A Case Report

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### ABSTRACT

**Introduction:** Epithelial cyst of spleen is infrequent and around 800 cases found published in literature till date.

**Case Report:** The case being discussed here occurred in a male, 12 years, who presented with pain in left upper abdomen since one month associated with fever. Image screening studies with CT showed a hypoattenuating, well-defined intrasplenic lesion measuring 11x10x7 cm, with sharply demarcating splenic parenchyma. The patient had vague history having some serological examination for hydatid disease which was found to be positive of IgG antibodies for hydatid disease few months back. After total splenectomy, histopathological examination of splenic cyst showed a cystic lesion lined by flattened to attenuated cuboidal cells with focal areas of sloughing of the lining epithelium at places.

**Conclusion:** The diagnosis of primary epithelial cyst of spleen was highly significant in the fact that hydatid cyst of spleen has serious implications for the diagnosis and outcome.

**Key words:** Spleen, Splenomegaly, Epithelial, uniloculated, cyst

### INTRODUCTION

Epithelial cyst of spleen is infrequent and around 800 cases found published in literature till date. The present case is one of such few cases which were diagnosed incidentally in a clinically suspected case of hydatid cyst of spleen. Primary cysts are also called true, congenital, epidermoid or epithelial cysts. Nonparasitic cysts are either primary or secondary. Non-parasitic splenic cysts are common in Europe and North America, while parasitic cysts are common in Africa and Central America. [3] Primary splenic epithelial cyst is a rare condition with an incidence rate of 0.07% as reported in a review of 42327 autopsies. [7-10]

### CASE REPORT

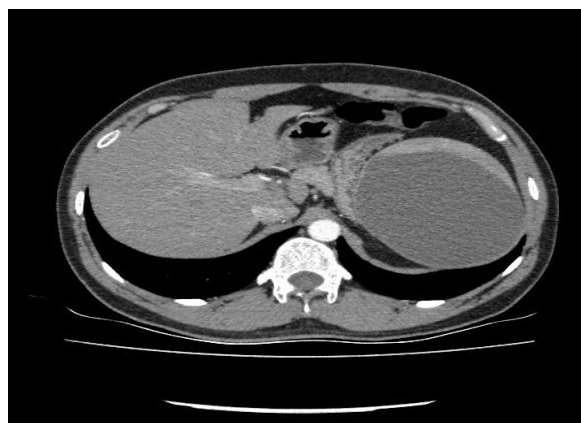
The case being discussed here occurred in a male, 12 years, who presented

with pain in left upper abdomen since one month. The patient presented with low-grade fever which he was getting off and on. On examination he was found to have modest splenomegaly.

USG of the spleen showed an anechoic mass with thin wall. Further image screening studies with CT showed a hypoattenuating, well-defined intrasplenic lesion measuring 11x10x7 cm, with sharply demarcating splenic parenchyma with no rim of internal enhancement or calcification. A diagnostic aspiration under image guidance was carried out. The patient had vague history having some serological examination for hydatid disease which was found to be positive of IgG antibodies for hydatid disease few months back. Hence, it was clinically assumed that the cystic lesion in the spleen was hydatid cyst. Laparotomy

was done and complete splenectomy was done with the cystic lesion.

Histopathology laboratory received the splenectomy specimen. On gross examination, the spleen was grayish-brown in colour with focal areas of congestion. On cut section, a unilocular cystic lesion measuring 11.5x10.7cm was noted in the postero-superior aspect of spleen. The cyst showed a thin, innocuous cyst wall and contained Pale yellow clear fluid.



(a) CT showed a hypoattenuating, well-defined intrasplenic lesion measuring 11x10x7 cm, with sharply demarcating splenic parenchyma.



(b)

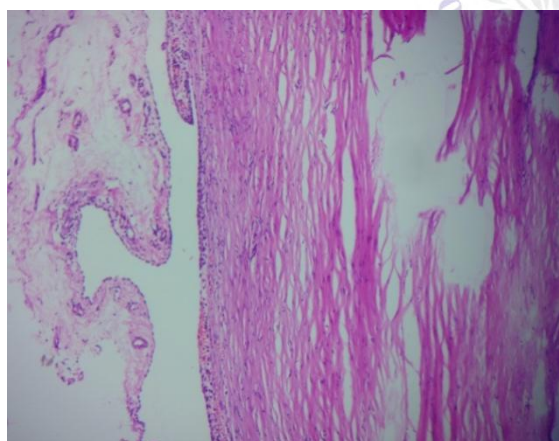


(c)

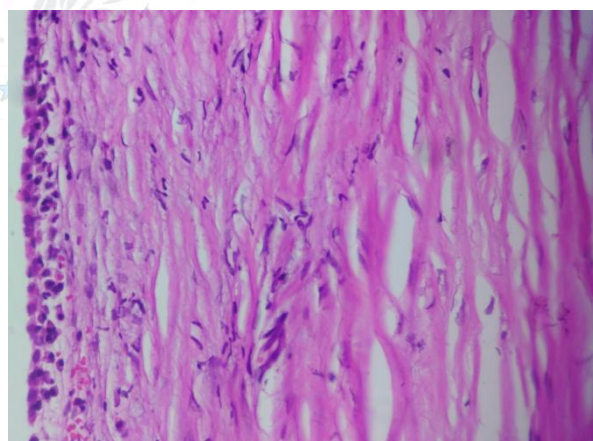


(d)

(b),(c)&(d) Gross specimen of Spleen with splenic cyst.



(e)



(f)

e) Low power view (10 x) & f) high power view (40x) . Photomicrograph showing splenic cyst wall lined by flattened to low cuboidal epithelium. (H & E)

Histopathological examination of splenic cyst showed a cystic lesion lined by flattened to attenuated cuboidal cells with focal areas of sloughing of the lining epithelium at places. The cystic cavity containing scant amorphous debris. No evidence of presence of trabeculated cyst wall or presence of daughter cysts and

hydatid sand characteristic of hydatid cyst was noted in multiple areas of the cyst which was extensively sampled. Histologically, it was concluded that it was a primary epithelial cyst of spleen, which is a rare occurrence as not many reported cases of primary epithelial cyst are reported in English literature.

## DISCUSSION

Fowler and Martin classified splenic cysts based on the presence or absence of cellular lining of the cystic wall as primary (true) or secondary (pseudo) cysts. [1,2] Most true splenic cysts are epithelial in origin and have embryonic inclusion of epithelial cells from adjacent structures. [4] Splenic cysts may be of parasitic or non-parasitic origin. The pathogenesis of primary splenic cysts is not clear. The occurrence of a unilocular cyst in the absence of previous trauma, infection or exposure to hydatid disease may help to arrive at the diagnosis.

Primary epithelial cysts are usually solitary, but can be multiple. Cases have also been described in accessory spleens of a unilocular cyst with smooth glistening inner wall surface. Two rare cases of patients with epithelial splenic cysts as an incidental finding during emergency laprotomy for splenic rupture were reported. [5] The most common infection is caused by Salmonella bacteria. [7] Splenic epithelial cysts occur predominantly in the second and third decades of life but can occur in children and even in infants. [6]

Here in this presenting case, the definite diagnosis is possible only after splenectomy when epithelial lining is confirmed by histopathology. A comprehensive differential diagnosis for a cystic lesion of the spleen includes parasitic echinococcal disease, congenital cyst, intrasplenic pancreatic pseudocyst, pseudocysts from splenic trauma, infarction, infection, pyogenic splenic abscess, metastatic disease and cystic lymphangioma/hemangioma (rare).

## CONCLUSION

The case presented here of primary epithelial cyst of spleen is highly uncommon and unique in the sense that very few cases of the kind have been observed to be published in English literature. The primary epithelial cyst of spleen was diagnosed based on gross and microscopic findings, albeit the serological tests for

hydatid cyst done elsewhere outside laboratory few months before were found to be positive for hydatid cyst. The diagnosis of primary epithelial cyst of spleen was highly significant in the fact that hydatid cyst of spleen has serious implications for the diagnosis and outcome of patients diagnosed with such a splenic cyst.

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