



**Case Report:**

**Epidermoid Cyst of Spleen**

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**Abstract:**

Splenic cysts are very rare lesions, most of them being parasitic cysts. Nonparasitic cysts are uncommon. We report a case of young female who presented with mass and pain abdomen. Ultrasound examination revealed splenic syst. The diagnosis of epidermoid cyst was made based on characteristic lining on histopathological examination

**Key Words:** Epidermoid cyst, Spleen

**Introduction:**

Splenic cysts are rare lesions. Most of them are parasitic cysts. Nonparasitic cysts are uncommon lesions of spleen. Epidermoid cyst is a nonparasitic cyst, present most frequently in 2<sup>nd</sup> and 3<sup>rd</sup> decades of life. The final diagnosis depends on histopathological examination of the cyst.

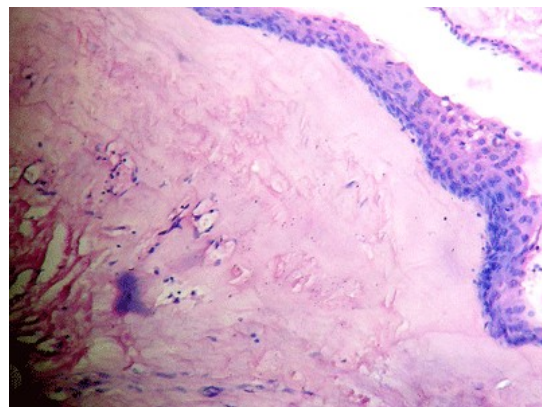
**Case Report:**

A 28-year-old female was admitted with the complaint of mass in the abdomen and left upper quadrant pain. On physical examination the spleen was enlarged up to the umbilicus. USG abdomen showed a huge cyst measuring 16x11 cm in the left hypochondrium. Clinically a possibility of pseudopancreatic cyst and splenic cyst was made. Ultrasound examination revealed a cyst in the spleen. Patient underwent splenectomy and the specimen was sent for histopathological examination.

Grossly the spleen weighed 550 gm and measured 20x14x8 cm. A cyst measuring 15x11 cms replaced the major portion of the spleen. The inner cyst wall was grayish white and glistening and showed coarse fibrous trabeculations (Figure 1). Histologically the cyst was composed of thick fibrous wall and an interior lining of stratified squamous epithelium, without skin appendages (Figure 2). At places the epithelium was desquamated. The diagnosis of epidermoid cyst of spleen was made.



**Figure 1:** Cut section of the spleen showing cyst with typical coarse trabeculation in the inner wall



**Figure 2:** Microscopy of the cyst wall shows the stratified squamous lining epithelium

**Discussion:**

Cystic lesions of the spleen include parasitic and nonparasitic cysts.<sup>1</sup> Parasitic cysts are almost exclusively caused by echinococcal disease and represent 50 to 80% of splenic cysts. Nonparasitic cysts are classified as primary or true cysts, which have an epithelial or an endothelial lining and accounts for around 10% and pseudocysts, which can be post traumatic, degenerative or inflammatory.

The epidermoid cysts lined by squamous epithelium are true cysts and are most likely congenital in origin and very rarely they can be familial.<sup>2</sup> They can develop from inclusions of splenic surface mesothelium lining into the splenic parenchyma to form a cyst during development which later develop squamous metaplasia<sup>3</sup> and gradually grow in size.

The diagnosis of true splenic cysts is commonly made in the second and third decades of life. The most common presenting complaint is pain which can be dull aching or fullness in the left upper abdominal quadrant.<sup>4</sup> symptoms are more with cysts more than 8 cm in diameter. Occasionally these cysts can be an incidental finding and are asymptomatic. Rarely can present with acute symptoms related to rupture, hemorrhage or infection.

The diagnosis can be made by CT imaging, but the final diagnosis depends on the histopathological examination of the cyst.

The epidermoid cyst has uniquely identifiable gross features. The inner wall of the cyst is gray white or smooth and glistening and have prominent trabeculations.<sup>5</sup> This appearance is same regardless of histological lining. The fluid in the cyst can be of variable consistency ranging from thin to viscid. The fluid can be colorless to varying shades of green , brown or yellow.

Histologically the epidermoid cyst is usually composed of a loosely fibrous wall and a layer of stratified squamous epithelial lining or a single layer of flattened epithelium without skin appendages. Sometimes the epithelium can be desquamated and no lining exists in some portions of wall. If the lining is flattened it can be mistaken for the endothelium. Positive for keratin and negative for factor 8 helps in diagnosis of epidermoid cyst.

The treatment is surgical and splenectomy is the best choice. However spleen conservative surgeries like total cystectomy or partial splenectomy can be done for smaller cysts.<sup>5</sup>

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