Case Report:
Splenic Epithelial Cyst with Elevated Ca 19-9 Levels

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Abstract: Primary epithelial cysts of the spleen are very rare entities. Few cases have been reported in literature till date. We report a 19 years old female who presented to us with a large epithelial cyst of the spleen and elevated CA 19-9 levels.

Key Words: Splenic cyst; Abdominal mass; Epithelial cyst; CA 19-9

Introduction:
Splenic cysts are very unusual in everyday surgical practice. They can be parasitic or non-parasitic. Nonparasitic cysts are classified as primary (true, epithelial), lined by an epithelial cover (epidermoid, dermoid and mesothelial) or endothelial cover (hemangioma, lymphangioma), and secondary (pseudocysts, nonepithelial), which are usually of post-traumatic origin. In the last decade, approximately 30 cases of epithelial splenic cysts associated with high serum concentrations of CA 19-9 were reported. We present a patient with a large epithelial splenic cyst accompanied by high levels of CA 19-9 in the serum.

Case Report
A 19 years old female presented to us with a palpable mass per abdomen in the left upper quadrant which has been gradually increasing in size over the past one year. The mass was associated with constant, dull aching and non radiating pain over the past one month duration. There were no other symptoms of note. The patient does not give any history of trauma. Patient does not have any comorbid illnesses or any previous surgical history. General physical examination was within normal limits. Per abdominal examination revealed a 18x10cm mass occupying her left upper abdominal quadrant. Mild tenderness could be elicited. There was no hepatomegaly. Rest of the abdominal and systemic examination was unremarkable. Her routine blood investigations were normal. CA 19-9 was very high (1118 units/ml) and CEA was normal.

Ultrasonography of the abdomen revealed a large cystic mass with papillary projections in epigastrium extending towards pancreatic tail region. Contrast enhanced computerized tomography of the abdomen confirmed the cystic mass arising from the spleen abutting the tail of pancreas. At laparotomy, a huge cyst was found emerging from the hilum of the spleen and compressing the rest of the splenic parenchyma(Figure1). These findings resulted in total splenectomy(Figure 2) which was followed by an uneventful postoperative recovery. During the 4 weeks after the operation, CA 19-9 dropped to normal value. Pathological examination of the specimen confirmed a benign, true, epithelial splenic cyst.

Figure 1: Cyst from the hilum of the spleen, compressing the rest of the splenic parenchyma.
Operative intervention is indicated for symptomatic cysts and for large cysts. Symptomatic splenic cysts have been considered as high-risk lesions for future automatic rupture, which explains why most authors include them in the indications for surgical treatment (either splenectomy or more conservative operations). Rupture is more likely in lesions exceeding 4-5 cm in diameter, thus setting this size as the minimal indication for asymptomatic cyst operative treatment. Today the optimal treatment options are partial splenectomy, total cystectomy, marsupialization, or cyst decapsulation (unroofing), accessed either by open laparotomy or laparoscopy.

However, any type of conservative procedure is difficult to perform, if the cyst is very large, is located in the splenic hilum, or is covered completely by the splenic parenchyma (intrasplenic cyst), or if there are multiple cysts (polycystic cases). In these cases, a complete splenectomy should be performed.

References