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Primary retroperitoneal mature cystic teratoma in an adult: A case report

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ABSTRACT

BACKGROUND: Mature cystic teratoma is one of the most common tumors of the ovaries; however, primary retroperitoneal lesions are rare entities in adults.
CASE SUMMARY: We report a case of a 33 year-old woman noticing a mass in her epigastric and left upper abdominal region without any specific signs and symptoms. Radiological evaluation revealed a retroperitoneal mass with extension from the posterior aspect of the pancreas to the pelvic cavity, composed of calcifications and cystic elements.
CONCLUSION: The tumor was resected through a midline laparotomy and the pathology report confirmed the diagnosis of a mature cystic teratoma with no evidence of malignancy or immature components.

1. Introduction

Composed of a mixture of dermal cells derived from the three germ cell layers (ectoderm, mesoderm or endoderm), primary mature teratomas are rare neoplasms characterized by inclusion of any well-differentiated parenchymal tissues [1]. These tumors are most commonly found in testes and ovaries but extragonadal sites have also been reported including intracranial, cervical, mediastinal, retroperitoneal and sacrococcygeal [2–4]. Accounting for only 4% of all primary teratomas, retroperitoneal lesions are rare and more common among children rather than adults [5]. We report a case of a huge asymptomatic primary retroperitoneal mature cystic teratoma in a 33 year-old woman.

2. Case report

A 33 year-old woman presented with a mass in her upper abdomen. She first palpated the lesion two and a half years ago after undergoing a caesarean section. Recently she noticed an increase in the size of the mass and referred to the clinic. She denied any associated symptoms including fever, loss of appetite, weight loss, nausea, vomiting or pain. She had no underlying diseases. The only surgery she had undergone was the mentioned caesarean section two. She denied taking any medications, smoking or alcohol consumption and her family history was unremarkable.

She was normotensive with a blood pressure of 110/70 mmHg, her pulse rate was 76 per minute, her respiratory rate was 16 per minute and her oral temperature was 36.8 °C. Her physical examination was unremarkable except for a firm, non-mobile fullness palpated in her epigastric region and left upper quadrant of the abdomen without any tenderness or abdominal guarding. The extent of the mass could not be established. Laboratory results were as follows: HGB = 11, Cr = 1, CA19–9 = 0.6, CEA = 76.6 and CA125 = 78.7.

A Computed Tomography Scan (CT) was performed for the patient that revealed a large retroperitoneal tumor posterior to the pancreas and anterior to the left kidney, extending to the pelvic cavity. The stomach and the pancreas were pushed forward and the mass was compressing on the small bowel loops. The tumor contained calcifications along with heterogeneous cystic lesions measuring 210 × 154 mm (Fig. 1B). Pancreatic pseudocyst and ovarian tumors were the most probable diagnoses suspected based on the findings of the CT scan.

The patient underwent laparotomy and through a midline incision above and below the umbilicus exploration was performed. A huge retroperitoneal mass was observed. Liver, spleen, small intestine, peritoneum and the pelvic cavity were thoroughly examined for metastases and none were found. No ascites were observed and based on the findings a decision was made for total excision of

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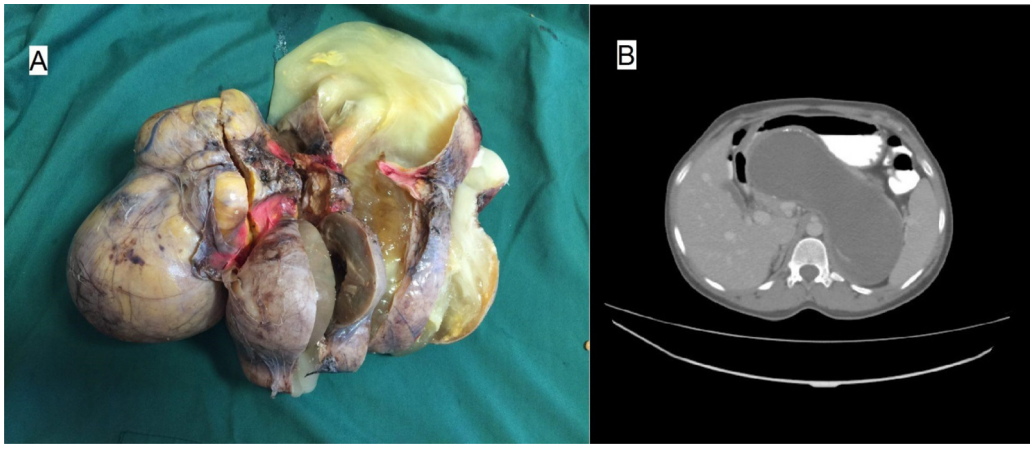

Fig. 1. (A) Gross view of the resected tumor showing various tissue types within the mass. (B) Axial view of the CT scan showing a large retroperitoneal tumor posterior to the pancreas and anterior to the left kidney pushingthe stomach and the pancreas forward and compressing on the small bowel loops. The tumor contained calcifications along with heterogeneous cystic lesions measuring 210 × 154 mm.

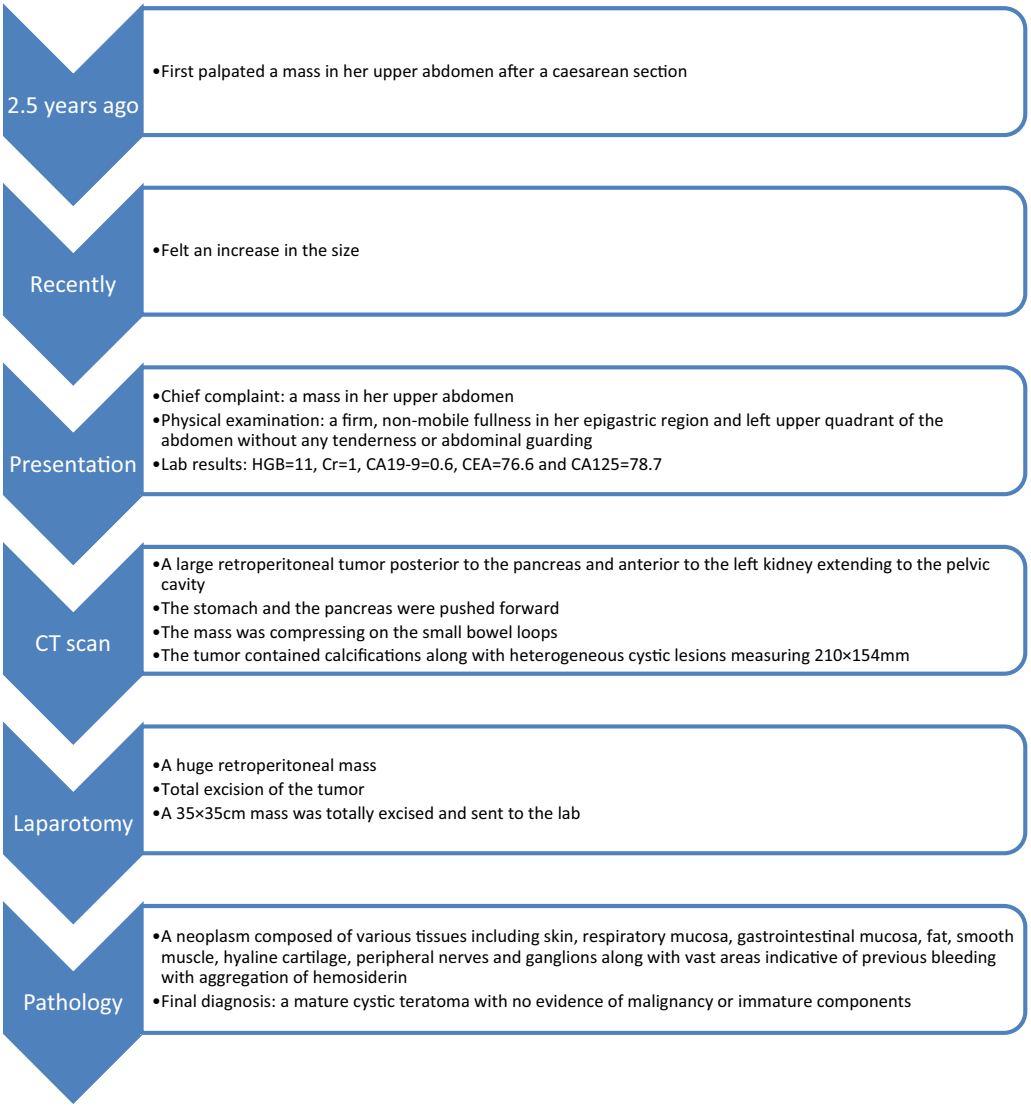

Fig. 2. Timeline showing the patient's presentation to her final diagnosis.

the tumor. First the adhesions were released and the tumor was separated from the descending colon, splenic flexure, transverse colon, surrounding tissues and mesocolon, gerota fascia, posterior aspect of the pancreas, splenic and superior mesenteric veins,