

## Mature Cystic Teratoma of the Pancreas

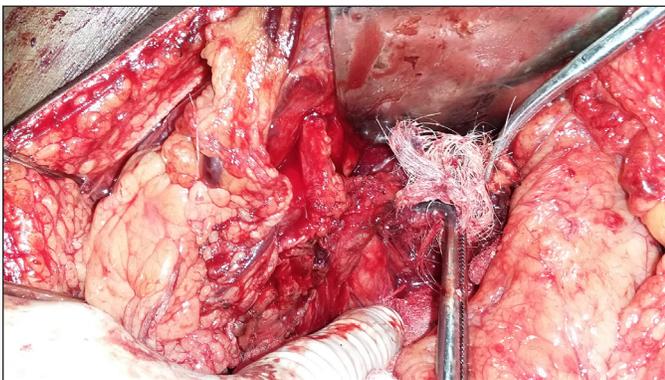
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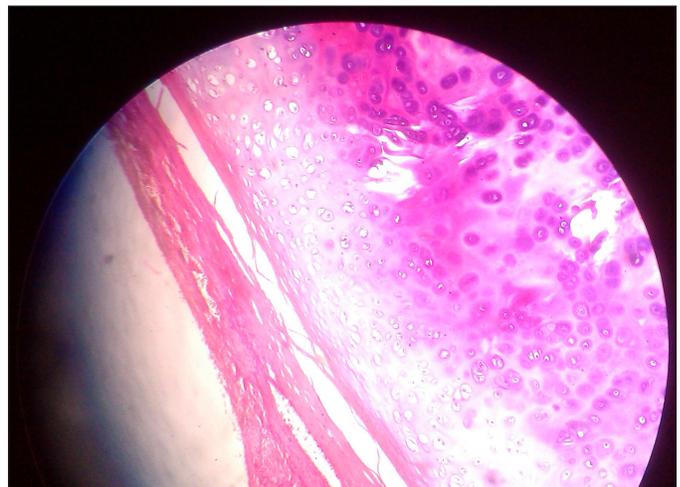
### Case Report

We report a case of a 41-year-old man with a mature cystic teratoma (MCT) of the pancreas, who presented with a 6-month history of dull, aching pain and tense, globular, ill-defined upper abdominal swelling. Abdominal ultrasound showed a 5 x 4.8 cm tumor in the pancreatic body, with mixed cystic and solid components. Serum amylase, lipase, CA 19-9, and carcinoembryonic antigen were normal. A contrast abdominal computerized tomography (CT) scan of the showed a pancreatic mass with solid as well as cystic components and calcification. Endoscopic ultrasound (EUS) showed a 4.8 x 4.5 cm pancreatic mass with solid and cystic components and central and peripheral calcific specks. EUS fine-needle aspiration (FNA) from the cyst revealed mucus-like material, suspicious for mucinous cystadenoma. Cyst fluid analysis for CA 19-9 and CEA was negative. Cystectomy was performed on a cyst in the inferior surface of the head and body of the pancreas. The contents of the cyst showed hair and a tooth (Figure 1). Histopathology sections showed bony trabeculae with marrow elements, hyaline cartilage, nerve bundles with ganglion cells, hair shafts, adipose tissue, keratinous material, focal areas of calcification, and fragments of stratified squamous epitheliumsuggestive of mature cystic teratoma of pancreas (Figure 2). There was no evidence of malignancy.

MCT of the pancreas is a rare entity with 30 cases reported in the literature to date.<sup>1</sup> Preoperative diagnosis of pancreatic MCT is challenging. Magnetic resonance imaging (MRI) T1-weighted images show cystic lesions with distinct margins and fat-fluid levels of low intensity. EUS-FNA is a safe and cost-effective technique to detect both malignant and benign neoplasms of the pancreas, allowing for differentiation between solid tumors, cystic neoplasm, pseudocyst, and reactive change.<sup>2</sup> EUS-FNA of the pancreas is both sensitive and specific (64–98% and 80–100%, respectively), and has a high positive predictive value (98.4–100%).<sup>2,3</sup> More than 70% of excised pancreatic cystic lesions are either malignant or prema-



**Figure 1.** Hair and cartilaginous material removed intraoperatively from the mature cystic teratoma of pancreas.



**Figure 2.** Cyst wall lined by flat epithelial cells over cartilaginous tissue made mature chondroid cells, derived from mesodermal cells.

*ACG Case Rep J* 2016;3(2):80-81. doi:10.14309/crj.2016.5. Published online: January 20, 2016.

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lignant, and surgical excision should be considered for any symptomatic cystic lesion or lesion larger than 2–3 cm in size.<sup>1,4</sup> Surgical resection is the definitive treatment and cure for MCTs, and is indicated in consideration of the difficulty diagnosing MCTs preoperatively.

## Disclosures

Author contributions: KD Chakaravarty wrote the manuscript. CD Venkata, I. Manicketh, R. Singh, P. Mathew, S. Devashetty, and PKA Chetty revised the article for important intellectual content.

Financial disclosure: None to report.

Informed consent was obtained for this case report.

Received August 5, 2015; Accepted November 19, 2015

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