

## Cystic lesions of the pancreas: Improved understanding, diagnostics and refined outcomes

Cystic neoplasms of the pancreas are increasingly diagnosed. Consequently, there is a need for greater awareness and a clear understanding of these tumors so that appropriate management strategies can be employed. The outlook of appropriately treated cystic neoplasms of the pancreas is excellent.

Cystic neoplasms of the pancreas constitute about 10-20% of pancreatic tumors. Malignant cystic pancreatic tumors behave similar to pancreatic ductal adenocarcinomas and therefore need aggressive surgical resection. On the other hand, certain benign cystic neoplasms do not require operative intervention and can be safely observed. The category in between the above two categories is the one where tumors exhibit low grade malignant behavior and those with malignant potential. The modern day pancreatologist is expected to differentiate between these three categories to enable appropriate treatment decisions. The World Health Organization classification (2010) of pancreatic cystic neoplasms differentiates serous cystic, mucinous cystic, intraductal papillary mucinous and solid pseudo papillary neoplasms (SPN).

The management of cystic neoplasms of the pancreas has progressed in recent times due to advances in imaging and the easy availability of computed tomography (CT). Over the past decade alone, there has been a 10-fold increase in the reported incidence of cystic neoplasms, partly due to the increased use of CT imaging and endoscopic ultrasound, incidentally discovering these pancreatic cystic neoplasms.<sup>[1]</sup> It is in this context, the current paper by Patnayak *et al.* assumes some significance since it further increases awareness about this uncommon group of tumors.<sup>[2]</sup> Due to paucity of numbers and lack of reporting, the natural history of these tumors largely remains ill-understood.

These tumors are often discovered by chance during the diagnostic imaging procedures or may be suspected in the presence of an asymptomatic palpable mass in young women. In our own series, 10/14 patients presented with dull aching abdominal pain while two patients presented with an abdominal mass. It is important to note that these patients generally present in excellent general condition unlike patients with ductal adenocarcinoma.<sup>[3]</sup> CT appearance of SPN is generally of hyper vascular peripheral

solid components and central cystic components.<sup>[4]</sup> While some utility of diagnostic fine needle aspiration has been reported,<sup>[3,5]</sup> it is not necessary to have a tissue diagnosis pre-operatively, and surgery can be advised on the basis of radiological imaging.

Many pathologic features have been described; however, the histogenesis of these tumors is not clearly defined, but they possibly originate from the primordial cells and lack definite endocrine and exocrine differentiation. From an oncology perspective, it is pertinent to note that despite being an encapsulated tumor, the microscopic interface between tumor and adjacent normal pancreas does show an infiltrative growth pattern.<sup>[6-8]</sup>

SPN are considered to be tumors of low-grade malignant potential.<sup>[9]</sup> The logical conclusion is that complete surgical excision is the best option for patients who have SPN. Thus, surgery should always be attempted in a suspected case of SPN even if it implies that major resections (like pancreatico-duodenectomy along with adjacent organ resection) have to be performed.

There also exist reports of aggressive surgery with fair outcomes in patients with favorable metastatic disease. However, solid pseudo papillary tumors of the pancreas can present in a bizarre, widely-metastatic fashion and yet lack the histological features of a solid pseudo papillary carcinoma.<sup>[10]</sup>

The present study, highlights once again the rarity of these tumors as well as the various diagnostic features.<sup>[2]</sup> Until this entity is better understood and since early and precise diagnosis remains elusive, the ideal approach is to proceed with resection (with excellent long term outcomes) when in doubt in centers of excellence in this era of increasingly safe pancreatic surgery.

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**Letter to Editor**

## An unusual case of clear cell sarcoma presenting as multiple abdominal masses confirmed by RT-PCR

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**Letter to Editor**

## A case of synchronous double malignancy: Invasive bladder cancer and Leiomyosarcoma of extremity and review of literature

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