

LETTER TO THE EDITOR

Mucinous Cystic Neoplasm of the Pancreas in a Male Patient Diagnosed by Endoscopic Ultrasonography

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TEXT

Based on World Health Organization (WHO) criteria, mucinous cystic neoplasms (MCNs) of the pancreas are defined as cystic epithelial neoplasms composed of mucin producing columnar epithelium and an ovarian-type stroma (OS) [1]. Diagnosis and surgical resection of MCN are important because of its significant malignant potential. MCNs almost always occur in women. We present a case of MCN in a male patient diagnosed by endoscopic ultrasonography (EUS) preoperatively.

A 59-year-old man with an asymptomatic cystic lesion in the pancreatic body was referred to our hospital. The abdominal CT scan revealed a 30-mm unilocular cystic lesion in the pancreatic body (**Figure 1**). Magnetic resonance imaging (MRI) showed a hypointense mass lesion in T1-weighted imaging, and hyperintense in T2-weighted imaging. Magnetic resonance cholangiopancreatography (MRCP) showed a unilocular cystic lesion in the pancreatic body without dilatation of the main pancreatic duct (**Figure 2**). EUS revealed “cyst in cyst” appearance and a mural nodule in the lesion (**Figure 3**). He underwent laparoscopic distal pancreatectomy with a preoperative diagnosis of a MCN. Histologically, the cystic lesion revealed low grade dysplasia with an OS (**Figure 4**). Immunohistochemically, the stromal layer was positive for progesteron and estrogen receptors. MCN was finally diagnosed.

Diagnostic errors of cystic lesions of the pancreas are quite common. The overall accuracy of the preoperative diagnosis was 60.9% [2]. MCNs typically appear as large unilocular or multilocular cysts with thin septate on CT or MRI. Differential diagnosis is still difficult especially in case of unilocular lesion because other pancreatic neoplastic lesions sometimes appear unilocular cyst. EUS may be more helpful for the diagnosis and differentiation of the cystic lesion because of its high resolution and

better imaging characteristics than other modalities [3]. EUS was also useful for diagnosis in our case. Although the frequency of “cyst in cyst” appearance of MCN on EUS has been reported not so high as 38 %, it is a specific feature of MCN on EUS [4].

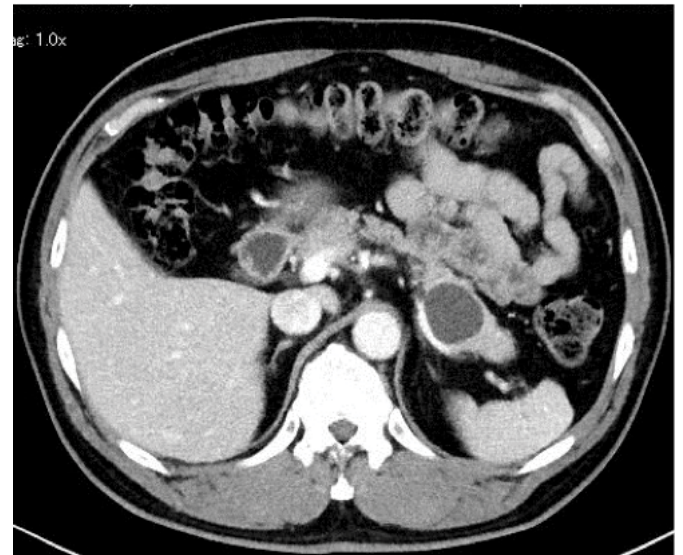


Figure 1. The abdominal CT scan revealed a 30-mm unilocular cystic lesion in the pancreatic body.

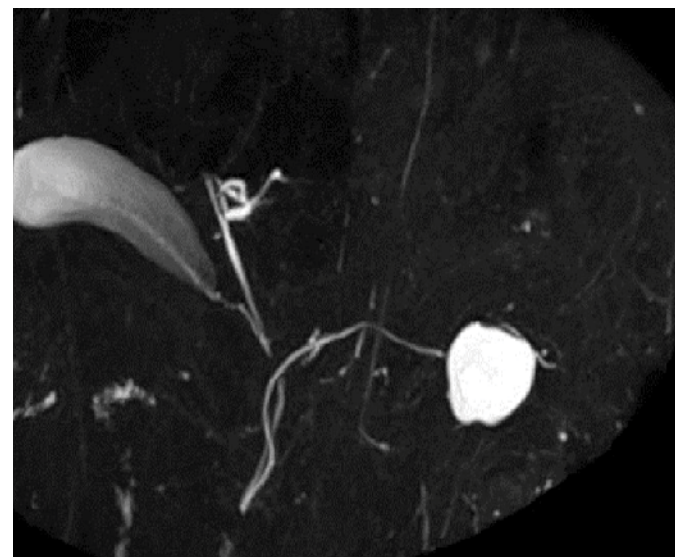


Figure 2. Magnetic resonance cholangiopancreatography showed a unilocular cystic lesion in the pancreatic body without dilatation of the main pancreatic duct.

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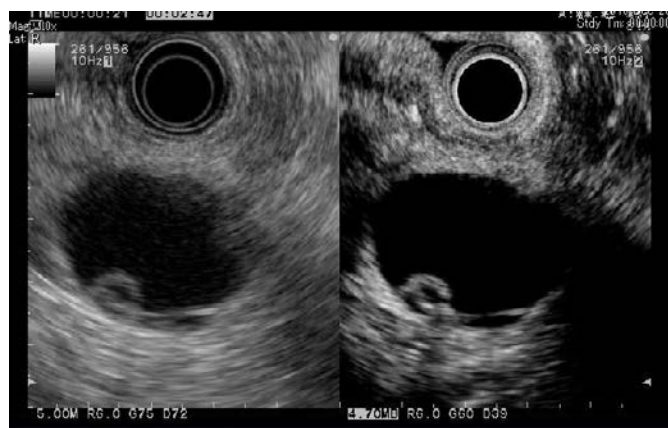


Figure 3. Endoscopic ultrasonography showed “cyst in cyst” appearance and a mural nodule in the cystic lesion.

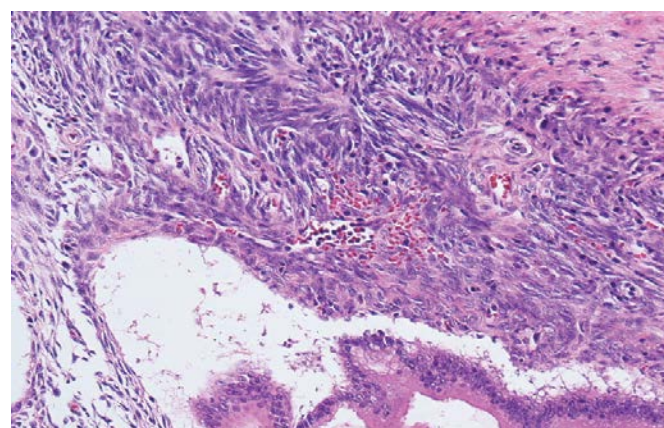


Figure 4. The cystic lesion revealed low grade dysplasia with an ovarian-like stroma.

Table 1. Mucinous cystic neoplasm in male patients described in literature.

Author, year	Age	Site	Size	Symptom	Ovarian-Type Stroma
Wouters K, <i>et al.</i> 1998	43	Tail	25 mm	Abdominal pain	+
Reddy RP, <i>et al.</i> 2004	NA	NA	NA	NA	+
Hifumi M, <i>et al.</i> 2005	73	Tail	60 mm	NA	+
Suzuki M, <i>et al.</i> 2005	25	Tail	50 mm	Abdominal pain	+
Goh BK, <i>et al.</i> 2005	28	Tail	30 mm	Abdominal pain, weight loss	+
Tokuyama Y, <i>et al.</i> 2011	39	Body-tail	65 mm	Back pain	+
Yamao K, <i>et al.</i> 2011	26	Body-tail	NA	NA	+
	36	NA	NA	NA	+
	72	NA	NA	NA	+
Casadei R, <i>et al.</i> 2012	65	Body-tail	40 mm	No symptom	+
Fallahzadeh MK, <i>et al.</i> 2014	48	Tail	50 mm	No symptom	+
Nguyen D, <i>et al.</i> 2014	NA	NA	NA	NA	+
Aso K, <i>et al.</i> 2014	NA	NA	NA	NA	+
Present case, 2015	59	Body-tail	30 mm	No symptom	+

To our knowledge, only 13 cases of MCN were reported in men since intraductal papillary mucinous neoplasm and MCN clearly defined by the WHO (Table 1). Of these, only 8 cases were described in detail. Recently, a multi-institutional study of the Japan Pancreas Society reported only 3 men (1.9%) of 156 MCN patients with OS [5]. Among the 8 cases described in detail, CT were conducted in all cases, MRI in 6, and EUS in 4. However, in all but our case, the preoperative diagnosis was different from MCN because MCN almost exclusively occur in female, and the imaging studies do not infrequently show typical findings of MCN.

We present an extremely rare case of MCN in a male patient diagnosed by EUS with typical findings. MCN should be considered in the differential diagnosis of pancreatic lesion in men, as well as women.

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Conflict of Interests

Authors declare no conflict of interests for this article.

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