

# A Rare Cause of Chronic Abdominal Pain and Dilated Pancreatic Duct: Pancreatic Serous Cystadenoma

*Genişlemiş Pankreatik Kanalın ve Kronik Karın Ağrısının Nadir Bir Sebebi: Pankreatik Seröz Kistadenom*

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Serous cystadenoma (SCA) is a benign neoplasm that occurs more commonly in the elderly women. It accounts for 30% of all cystic tumors of the pancreas. In this report we present a 60 year-old male who complained of upper abdominal pain for seven months. His chronic pain has been responded to oral analgesics. There were not any pathologic findings in physical examinations. Serum biochemistry including blood sugar, serum amylase, lipase, CA 19-9 and carcinoembryonic antigen (CEA) were normal. His abdominal ultrasonography (US) indicated multicystic hypoechoic foci and contrast-enhanced computed tomography revealed (CT) round, hypodense cystic mass in pancreas with wall enhancement. Magnetic resonance imaging (MRI) showed dilated pancreatic duct and a cystic mass located in pancreatic head and body.

**Key Words:** Pancreas, Serous cystadenoma, Microcystic, Computed tomography, Magnetic resonance imaging

Seröz kistadenom daha yaygın olarak yaşlı kadınlarda görülen iyi huylu bir tümördür. Tüm kistik pankreas tümörlerinin %30'unu oluştururlar. Bu olguda, yedi aydır süren üst karın ağrısı şikayeti olan 60 yaşında bir erkek hastayı sunuyoruz. Hastanın kronik ağrısı, oral ağrı kesicilere cevap veriyordu. Fizik muayenesinde herhangi bir patolojik bulgu yoktu. Kan şekeri, serum amilaz, lipaz, CA 19-9 ve karsinoembriyjenik antijeni (CEA) içeren serum biyokimyası normaldi. Karın ultrasonografisinde (US) multikistik hipoekoik odak görüldü ve kontrastlı abdominal bilgisayarlı tomografi, pankreasta yuvarlak, hipodens, duvarı kontrastlanan kistik kitle olduğunu ortaya çıkardı. Manyetik rezonans görüntüleme (MRG), genişlemiş pankreas kanalı, pankreas başı ve gövdesinde kistik bir kitle olduğunu gösterdi.

**Anahtar Sözcükler:** Pankreas, Seröz kistadenom, Mikrokist, Bilgisayarlı tomografi, Manyetik rezonans görüntüleme

Serous cystadenoma (SCA) is an unusual, generally benign neoplasm that occurs more commonly in elderly woman (1). SCA is the common cystic neoplasm of the pancreas. It accounts for 30% of all cystic tumors of the pancreas. SCAs of the pancreas are being increasingly recognized with the help of widely used sophisticated imaging techniques. The differential diagnosis of SCA from non-neoplastic cysts such as pseudo cysts and other cystic neoplasms is important. In contrast to other cystic neoplasms, SCAs may not require surgery. However patients can rarely present with abdominal pain, mass effect or bile duct and gastric outlet obstruction (1, 2). Herein we report a case of pancreatic

serous cystadenoma as a rare cause of abdominal pain and infrequent reason of pancreatic duct dilatation.

## Case Report

Our case is a 60 year old man who complained of upper abdominal pain for seven-months. His chronic pain has been responding to oral analgesics. General physical and systemic examination was normal. There was no organomegaly. Serum biochemistry including blood sugar and serum levels of amylase, lipase, CA 19-9 and carcinoembryonic antigen (CEA) were normal. US of the abdomen revealed hypoechoic and multicystic foci within the pancreas. Computed tomography of the abdomen showed a cystic

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mass with enhancing walls located in the head and body part of the pancreas (Figure 1). No significant peripancreatic nodes were noted. Magnetic resonance imaging (MRI) showed a hypointense multicystic lesion on T1-weighted FS WATS BH sequence (Figure 2) and a hyperintense multicystic lesion with thin septations and dilated pancreatic duct on T2-weighted sequence (Figure 3). Actually, surgery is not recommended in patients with asymptomatic serous cystadenoma. Endosonographic biopsy attempts did not lead us to exact differential diagnosis. Our patient was operated due to chronic abdominal pain and to explain the etiology of dilated pancreatic ductus. The pancreatic lesion was successfully excised; pathologic material was concomitant with serous cystadenoma. Patient's

pain completely resolved after the surgery.

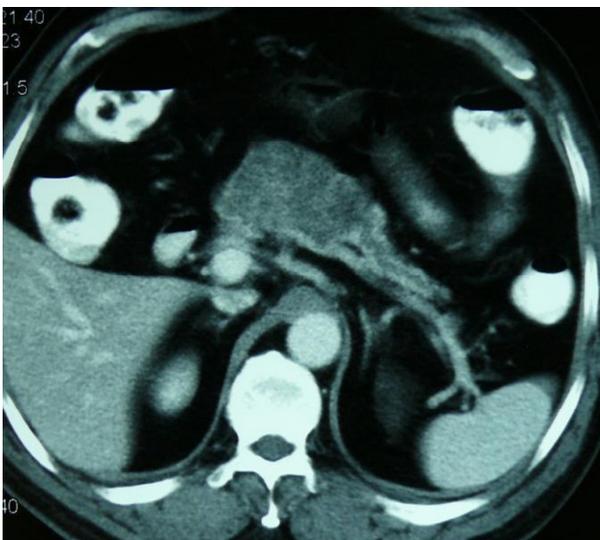
### Discussion

SCAs are usually asymptomatic and detected incidentally, but patients can present with abdominal discomfort or pain and/or mass (2, 3). The tumor can also present with bile duct and gastric outlet obstruction. We present a rare cause of abdominal pain in a patient with pancreatic SCA. Although our case is a man, SCAs are seen mostly in women (4). SCAs are benign cystic tumors of the pancreas with a very low potential for malignant transformation (3, 5). Sixty percent are located in the body and head of the pancreas.

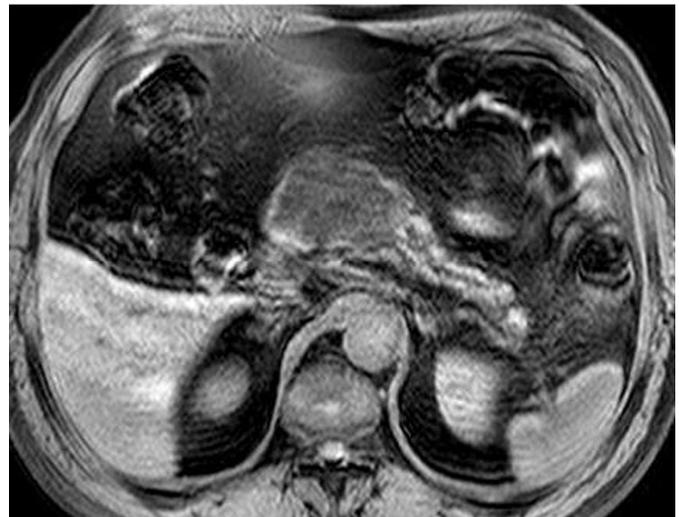
The most frequent (60-70%) presentation is a polylobulated lesion made up of multiple cysts less than 2 cm (microcysts). The oligocystic or

macrocytic variant (cysts > 2 cm), which make up less than 10% of cases may not be radiologically from mucinous lesions. Also there is a third variant, the rarest, which affects the entire gland diffusely and is associated with von Hippel-Lindau disease (6). The differential diagnosis of SCA from non-neoplastic cysts such as pseudocysts and other cystic neoplasms is of important because of the great difference in their management and biological behavior (7). In case of pseudocysts, the history of pancreatitis or trauma plays an important role in diagnosis. The preoperative differentiation between a benign serous cyst adenoma and malignant SCA remains difficult (8).

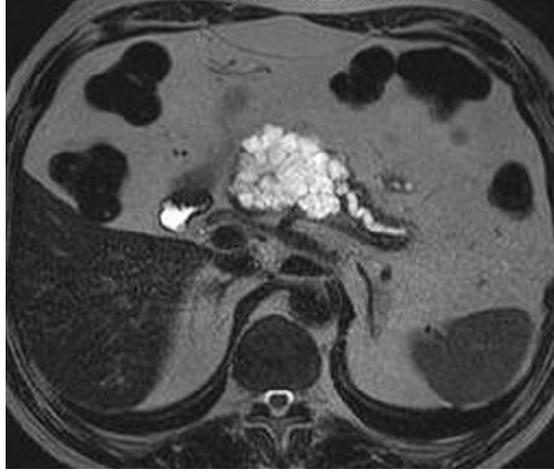
In contrast to other cystic neoplasms, SCAs may not require surgery (7). But surgery is indicated in symptomatic patients and in those with rapidly enlarging SCAs.



**Figure 1.** Computed tomography of the abdomen showed a cystic mass with enhancing walls located in the head-body part of the pancreas.



**Figure 2.** MRI showed hypointense multicystic lesion with dilated pancreatic duct on T1-weighted WATS FS BH sequence.



**Figure 3.** MRI showed hyperintense lesion with thin septations and dilated pancreatic duct on T2W sequence.

## REFERENCES

1. Hamilton SR, Aaltonen LA, eds. World Health Organization Classification of Tumours. Pathology and Genetics of Tumours of the digestive System. Lyon: IARC Pres, 2000. 231-232.
2. Tseng JF, Warshaw AL, Sahani DV, et al. Serous cystadenoma of the pancreas: tumor growth rates and recommendations for treatment. *Ann Surg* 2005; 242:413-419.
3. Compton CC. Serous cystic tumors of the pancreas. *Semin Diag Pathol* 2000; 17: 43-55.
4. Yamaguchi K, Enjoli M. Cystic neoplasms of the pancreas. *Gastroenterology* 1987; 92: 1934-1943.
5. Abe H, Kimura W, Mori M, et al. Mixed serous cystadenoma with mucinous cystadenoma of the pancreas. *Pancreas* 2005; 31:98-100.
6. Jorba R, Fabregat J, Borobia FG, et al. Cystic neoplasms of the pancreas. Diagnostic and therapeutic management. *Cir Esp* 2008; 84:296-306.
7. Procacci C, Graziani R, Bicego E, et al. Serous cystadenoma of the pancreas: report of 30 cases with emphasis on the imaging findings. *J Comput Assist Tomogr* 1997; 21:373-382.
8. King JC, Ng TT, White SC, et al. Pancreatic serous cystadenocarcinoma: a case report and review of the literature. *J Gastrointest Surg* 2009; 13:1864-1868.

