A rare case of pancreatic pseudocyst masquerading as hydrocele

A. Michalopoulos, V. Papadopoulos, S. Apostolidis, T. Papavramidis, D. Paramythiotis, P. Berovalis

1st Propedeutic Surgical Department, AHEPA Hospital, Aristotle's University of Thessaloniki, Thessaloniki, Greece.

A pancreatic pseudocyst is present as a cystic cavity bound to the pancreas by inflammatory tissue (1). Typically, the wall of a pancreatic pseudocyst lacks an epithelial lining, and the cyst contains pancreatic juice or amylase-rich fluid (2,3). This is the histopathological definition of a pancreatic pseudocyst.

The present case is extremely interesting because migration of the pancreatic pseudocyst, either upwards or downwards, is a very rare clinical entity.

A 34 years-old man with a known history of a recent episode of acute pancreatitis complained of having a soft swelling of the scrotum. On physical examination, a large bugle was noted in the scrotum, which was mobile but not reducible. The patient denied any form of abdominal pain, nausea, vomiting, or fever. The white blood cell (WBC) count was 7,300/mm^3, and amylase values were within the normal limits. Computed Tomography revealed a low density mass, in the scrotum, which wasn't communicating with the pancreas. A high suspicion for the existence of a pancreatic pseudocyst appeared. Our suspicion was confirmed when the cyst was evacuated by percutaneous drainage through the scrotum. The biochemical analysis of the fluid indicated high level of amylase (17000 IU/ml). The conservative treatment of the patient appeared very effective since the swelling mass disappeared after 6 weeks.

Various reports described pancreatic pseudocysts that migrate upward through the esophageal and aortic hiatus to the mediastinum or downward into the paraspinal gutters[4,5], while there is only one case presenting a pancreatic pseudocyst in the scrotum (6).

Percutaneous drainage has become an acceptable treatment of pancreatic pseudocysts, having as high as a 90% cure rate reported in some series (7,8). We believe percutaneous drainage of ectopic pancreatic pseudocysts can be an effective treatment method. Alternatives to percutaneous drainage include surgical excision, marsupialization, or endoscopic drainage Contraindications to percutaneous catheter drainage include the presence of pancreatic necrosis or a solid non-drainable pancreatic mass, lack of safe access route, active pseudocyst hemorrhage (9). The clinician must be aware that the patient with a history of pancreatitis and scrotal mass may in fact have a pseudocyst that has dissected to the scrotal region, especially if associated with elevated serum amylase values. A CT scan may confirm the diagnosis in this setting, allowing possible treatment with percutaneous drainage rather than surgery.

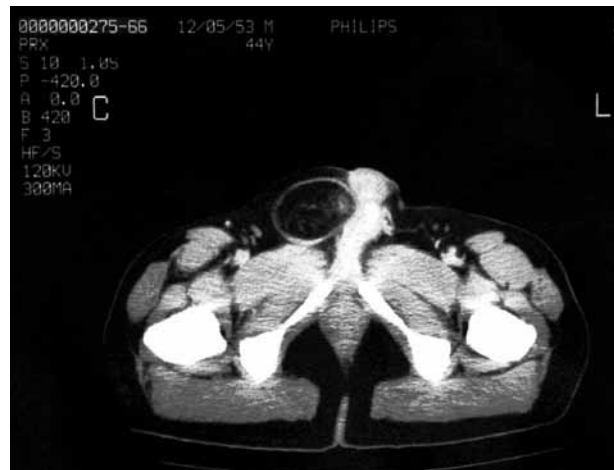

Fig. 1. — Computed tomography shows pseudocyst with pancreatic fluid dissection into the scrotum.

References

1. KLOPPEL G. Pseudocysts and other non-neoplastic cysts of the pancreas. *Semin. Diagn. Pathol*., 2000, **17** : 7-15.
2. RICHTER H.M. Natural history of pancreatic pseudocysts. *In* : HOWARD J., IDEZUKI Y., IHSE I., PRINZ R. (eds). Surgical diseases of the Pancreas. Baltimore : Williams and Wilkins, 1998 : 417-21.
3. BRESLIN N., WALLACE M.B. Diagnosis and fine needle aspiration of pancreatic pseudocysts : the role of endoscopic ultrasound. *Gastrointest. Endosc. Clin. N. Am*., 2002, **12** : 781-90.
4. SALVO A.F., NEMATOLAHI H. Distant dissection of a pancreatic pseudocyst into the right groin. *Am. J. Surg*., 1973, **126** : 430-432.
5. KARATZAS G.M. Pancreatic pseudocysts. *Br. J. Surg*., 1976, **63** : 55-59.
6. DELAMARRE J., DESCOMBES P., GRILLOT G., DESCHEPPER B., DERAMOND H. Hydrocele of pancreatic origin. X-ray computed tomographic study of an intrascrotal collection in an acute outbreak of chronic pancreatitis. *Radiol*., 1988, **69** (11) : 689-90.
7. VANSONNENBERG E., WITTICH G.R., CASOLA G. *et al.* Percutaneous drainage of infected and noninfected pancreatic pseudocysts : experience in 101 cases. *Interventional Radiol*., 1989, **170** : 757-762.
8. ADAMS D., ANDERSON M.C. Changing concepts in the surgical management of pancreatic pseudocysts. *Am. Surg*., 1992, **58** : 173-180.
9. YEO C.J. Pancreatic pseudocysts, ascites and fistulas. *Curr. Opin. Gen. Surg*., 1994, 173-178.

Corresponding author : Theodossis Papavramidis, M.D., 30 Korytsas str., Panorama, GR-55236 Thessaloniki, Greece.
E-mail : papavramidis@hotmail. com.

Submission date : 11.11.2006
Acceptance date : 21.11.2006