Epidermoid Cyst Mimicking Mucinous Cystic Neoplasm

Mori Y, Kurita A* and Yazumi S

Department of Gastroenterology and Hepatology, Kitano Hospital, Tazuke Kofukai Medical Research Institute

2. Clinical Image

A 77-year-old Japanese woman with cystic tumor of the pancreas was received regularly check-up in the other institution twice a year. She was introduced to our institution because her carbohydrate antigen 19-9 (CA19-9) level was elevated up to 487 IU/mL to investigate the cause. The physical examination was unremarkable and laboratory examination revealed elevated amylase (227 IU/L) and SPAN-1 (75 μL/dL). Contrast-enhanced computed tomography showed an oval-shaped cystic lesion 40 mm in diameter in the tail of the pancreas, which had a tiny enhanced component inside (Figure 1). Endoscopic ultrasoundography showed a cyst-in-cyst-like structure, with a thickened cystic wall along the entire circumference (Figure 2). Based on these imaging features, mucinous cystic neoplasm was most suspected and distal pancreatectomy was performed. Histopathologic examination revealed that the cyst was walled with stratified squamous epithelium and surrounded by a thin layer of red-colored tissue consisting of cells positive for CD31 (Figure 3A), and this layer was equivalent to that of the spleen (Figure 3B). Therefore, we finally diagnosed as epidermoid cyst in an intrapancreatic accessory spleen.

Epidermoid cyst in an intrapancreatic accessory spleen is rare benign cyst and characterized by non-neoplastic keratinizing epithelium surrounded by splenic parenchyma [1]. A previous study reported that about 52% of the patients present the elevated CA19-9 levels [2]. The presence of keratinization and the absence of a lymphoid component allows epidermoid cyst to be differentiated from other lesions containing squamous epithelium, including dermoid cysts and lymphoepithelial cysts. For diagnosing epidermoid cyst of the pancreas, detecting a component of spleen by imaging modalities such as super-paramagnetic iron oxide-enhanced magnetic resonance imaging is important for avoiding unnecessary operation. The suspicion of epidermoid cyst should be raised if when encountering a patient with a cystic lesion in the tail of the pancreas and elevated CA19-9 levels.

Figure 1: Contrast-enhanced computed tomography showed an oval-shaped cystic lesion in the tail of the pancreas, which had a tiny enhanced component inside.
Figure 2: Endoscopic ultrasonography showed a cyst-in-cyst-like structure, with a thickened cystic wall along the entire circumference.

Figure 3: Histopathologic examination revealed that the cyst was walled with stratified squamous epithelium and surrounded by a thin layer of red-colored tissue consisting of cells positive for CD31 (A). This layer was equivalent to that of the spleen (B).

References
