

Endoscopic Ultrasonography-Guided Fine Needle Aspiration Cytology for Diagnosis of Accessory Spleen Mimicking Neoplasm of Pancreas

Tassanee Sriprayoon¹
Nonthalee Pausawasdi¹
Tawatchai Pongpruttipan³
Wichit Srikureja¹
Thawatchai Akaraviputh²

¹Siriraj GI Endoscopic Center, Department of Medicine, ²Department of Surgery, ³Department of Pathology, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand.

A 66-year-old female presented with nonspecific abdominal discomfort for several months. She underwent an abdominal CT which showed a 1.2 cm arterially enhancing lesion in the pancreatic tail suspicious for neuroendocrine tumor (NET) (Figure 1). Endoscopic ultrasonography (EUS) was then performed and it showed a 1.2 cm × 1.2 cm round hypoechoic mass at the tail of pancreas (Figure 2). The

rest of the pancreatic parenchyma, pancreatic duct, and vascular structures were unremarkable. EUS-guided FNA was performed. Cytology revealed focal small lymphoid aggregates and sinusoidal-like tissue compatible with part of spleen (Figure 3).

Accessory spleen is a common congenital anomaly occurring in 10% of the general population¹. It rarely causes symptoms and usually presents as an

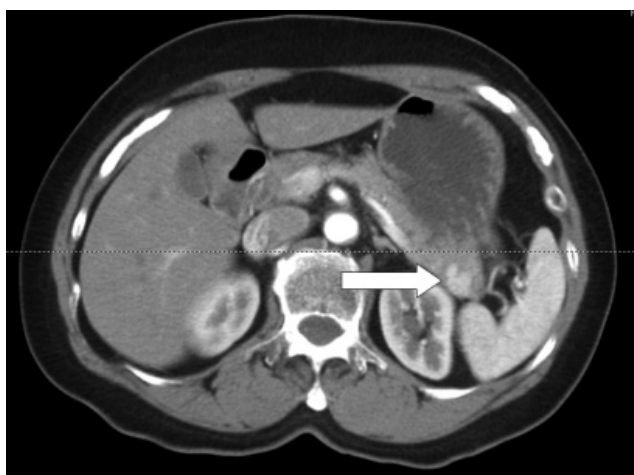


Figure 1. CT scan of abdomen revealed a 1.2 cm arterially enhancing pancreatic mass (white arrow).

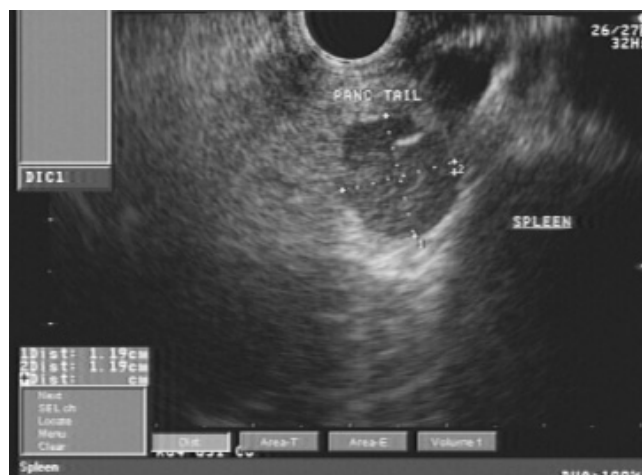


Figure 2. Linear echoendoscope showed a round hypoechoic mass at pancreatic tail.

Correspondence address : Thawatchai Akaraviputh, MD, Dr.med., Department of Surgery, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok 10700, Thailand; Telephone: +66 2419 8006; Fax: +66 2412 1370; E-mail: sitak@mahidol.ac.th

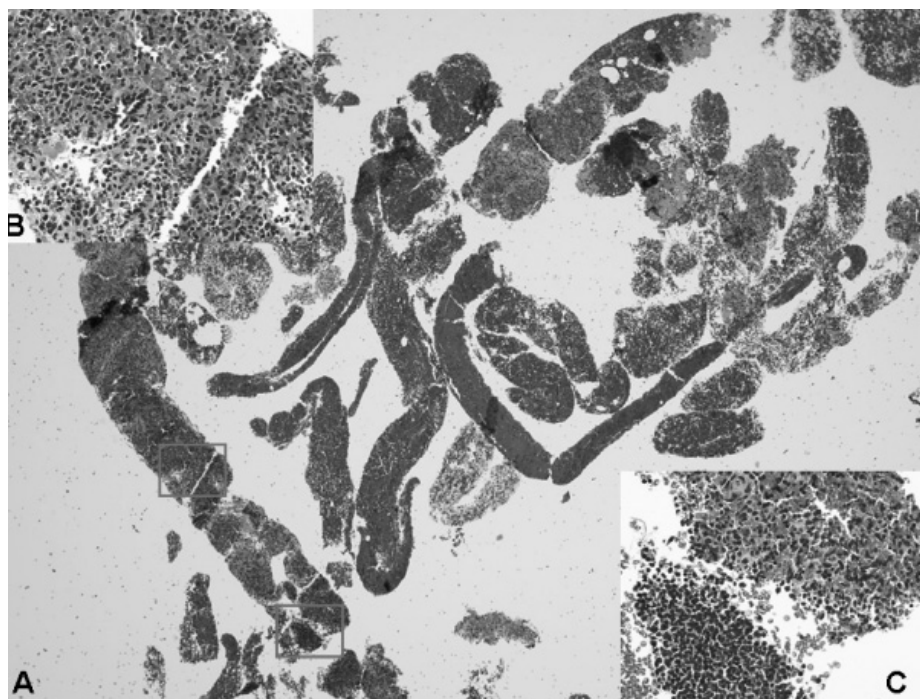


Figure 3. Cell blocks (H&E staining) from fine needle aspiration. A) At low power magnification, few representative tissue cores are noted (purple color) while some cores of clotted blood (pink red color) are also present. B) Splenic cords and sinunoids at high magnification. C) Lymphoid aggregation represents splenic white pulp.

incidental finding². It is commonly found in the region of hilum and pedicle of spleen^{3,4}. Accessory spleen is solitary in about 88% but can be multiple in 10% of cases¹. EUS findings of accessory spleen are usually round or sometimes oval with a regular shape or distinct outer margin. They can be either hyperechoic or hypoechoic but always homogenous, with the majority having echo intensity similar to that of the adjacent spleen⁵. In case of suspected malignancy, EUS-guided FNA may confirm the diagnosis. Cytopathologic evaluation of splenic tissue usually reveals lymphoid cells and epithelial cells consistent with lymphoid tissue.

In conclusion, accessory spleen can be

misinterpreted as neoplasm by a cross imaging study. EUS-guided FNA can help physicians to diagnose this benign lesion and prevent unnecessary operation.

REFERENCES

1. Halpert B, Gyorkey F. Lesions observed in accessory spleens of 311 patients. *Am J Clin Pathol* 1959;32:165-8.
2. Azar GB, Awwad JT, Mufarrij IK. Accessory spleen presenting as adnexa mass. *Acta Obstet Gynecol Scand*. 1993;72:587-8.
3. Curtis GH, Movitz D. Surgical significance of the accessory spleen. *Surgery* 1946;123:276-98.
4. Paul M. Accessory spleens. *Lancet* 1973;74-6.
5. Barawi M, Bekal P, Gress F. Accessory spleen: cause of misdiagnosis at EUS. *Gastrointest Endosc* 2000;52:6:769-72.