True and false splenic artery aneurysm on endoscopic ultrasonography: Two-case analysis

T. Silina[1], Đ. Butkevich[1], A. Shpitonkov[1], A. Brovkin[1], A. Nalivaiskyi[1], A. Filatov[1], T. Kutuzov[1], A. Lukyanov[1], I. Mostovoy[1], M. Koshelev[1], S. Gordeev[1], R. Ostretsov[1]

[1]Medical Rehabilitation Centre, Moscow, Russia

Introduction: The etiology of true and false splenic artery aneurysm is different, but the differential X-ray contrast diagnosis could be difficult. Purpose — to detect endoscopic ultrasonography (EUS) diagnostic capability for false and true splenic artery aneurysm by considering two clinical cases: With suspected stomach and pancreatic lesions.

Materials and Methods: First case: Patient, female, 50-year-old with suspected stomach lesion, complicated by gastric bleeding. Endoscopy — acute gastric ulcer. X-ray — submucosal gastric tumor. The patient was sent to the EUS with fine-needle aspiration. Second case: Patient, male, 73-year-old with suspected pancreatic neoplasm. Ultrasound — pancreatic cysts. Computed tomography (CT) — neoplasm of the pancreas body. Celiacography — splenic artery aneurysm. The patient was sent to the EUS to clarify the diagnosis.

Results: First patient EUS — anechoic rounded lesion with thick wall close to the stomach. Stomach wall

layers were not differentiated above the lesion. Doppler — turbulent blood flow. EUS excluded submucosal lesion and proved the presence of aneurysm. CT confirmed the aneurysm. Post-operative histology — splenic artery pseudoaneurysm, destruction of the stomach wall and pancreatic parenchyma. Second patient EUS — ovoid solid-cystic lesion with thin hyperechoic "capsule." Doppler in cystic part — arterial blood flow. EUS suspected saccular splenic artery aneurysm with the neck and the residual lumen. Post-operative histology — true splenic artery aneurysm with thrombotic masses near the wall, pancreatic parenchyma was intact.

Conclusion: EUS can reliably differentiate splenic artery aneurysm from gastric submucosal lesion and differentiate true and false aneurysm with high probability.

Status of the presenting author: Chief resident

The authors declare: No significant relationship.