Letter to the Editor

Splenic Tuberculosis Diagnosed by Endoscopic Ultrasound-Guided Fine Needle Aspiration

Surinder Singh Rana^{1*}, Deepak Kumar Bhasin¹, Chalapathi Rao¹, Adarsh Barwad², Pranab Dey², Santosh Sampath³, Bhagwant R Mittal³, Kartar Singh¹

Department of ¹Gastroenterology, ²Cytology and ³Nuclear Medicine, Post Graduate Institute of Medical Education and Research (PGIMER), Sector 12, Chandigarh 160012, India

[From the Editor] Although splenic tuberculosis (TB) without systemic symptoms might not be very rare in some area, the case of splenic TB confirmed by endoscopic ultrasound-guided fine needle aspiration (EUS-FNA) is not really described in recent literature. There's no doubt that EUS-FNA is an accurate, safe, and minimally invasive approach for differential diagnosis of splenic lesions. Therefore, the authors give us an important clue. When we encounter a similar case, some examinations for detecting TB and EUS-FNA should be considered.

A 39-year-old male patient presented with left upper quadrant abdominal pain, anorexia and weight loss of 3 months. Clinical examination was unremarkable. His laboratory investigations revealed normal hemogram, coagulation profile, and liver and renal function tests. Mantoux test and human immunodeficiency virus (HIV) serology were nonreactive. Chest X Ray as well as abdominal ultrasound was unremarkable. A positron emission tomographic scan with computed tomography fusion (PET-CT) scan showed focal hypodense lesions in spleen with intense [¹⁸F]-Fluoro-Deoxy-Glucose (FDG) tracer uptake (SUV Max = 8.6). After an informed consent, endoscopic ultrasound (EUS) examination was done which showed mediastinal lymphadenopathy as well as multiple hypoechoic lesions in the spleen (Fig. 1). EUS-guided fine needle aspiration (FNA) of the subcarinal lymph node as well as the splenic lesions was done using a 22-G needle (EchoTip, Wilson-Cook, Winston-Salem, North Carolina, USA) (Fig. 1). The cytological examination of mediastinal lymph nodes showed non-caseating epithelioid granulomas and stain for acid fast bacilli (AFB) was negative. The cytological examination of splenic lesion aspiration showed caseous epithelioid granulomas and AFB (Fig. 2). He was started on 4-drug anti-tubercular therapy (ATT) and had gradual improvement in his symptoms.

Splenic tuberculosis (TB) in an immunocompetent individual is very rare and poses a difficult diagnostic dilemma. The radiological investigations including ultrasound and contrast-enhanced computed tomography (CECT) have



Figure 1. Endoscopic ultrasound (EUS): Focal hypoechoic lesions in spleen and EUS-guided fine needle aspiration (FNA) done from splenic lesions.



Figure 2. Microphotograph shows epithelioid cell granuloma (May Grunwald Giemsa × 480). Inset: Acid fast bacilli (Ziehl Neelsen stain × 1200).

^{*}To whom correspondence should be addressed. E-mail: drsurinderrana@yahoo.co.in Received: 2012-09-02; Accepted: 2012-09-18 doi: 10.7178/eus.03.010

been reported to be useful for its diagnosis. The radiological findings reported are single or multiple focal lesions, splenic abscess, calcifications, and isolated splenomegaly.¹ However, splenic abscess, lymphoma, or metastasis to spleen can closely mimic splenic TB and therefore histopathological diagnosis is essential for proper management. Ultrasound-guided FNA has been shown to be useful for diagnosis of splenic lesions.² EUS also provides good images of the spleen through the gastric wall and in difficult situations especially inaccessible splenic lesions that are located closely to hilum. EUS-FNA has been reported to be useful modality for cytopathological diagnosis of splenic lesions.³⁻⁵ In addition, the ability to sample lesions with larger-gauge trucut biopsy needles increases the diagnostic yield of EUS-guided sampling by allowing histopathological examination.^{4,5}

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