

Endoscopic ultrasound-guided fine-needle aspiration of peritoneal deposits in patients with ascites of unknown cause (with videos)

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A 50-year-old male with no significant medical history presented with loss of weight, anorexia, and abdominal distension for last 1 month. Physical examination showed ascites. Laboratory examination revealed low serum ascites albumin gradient ascites. Diagnostic workup including upper gastrointestinal endoscopy, colonoscopy, echocardiography, ascitic fluid malignant cytology and adenosine deaminase levels were non-contributory. Contrast-enhanced computed tomography (CECT) of the abdomen revealed ascites and thickened omentum. Endoscopic ultrasonography (EUS) was performed from the stomach with the aim of doing fine-needle aspiration (FNA) of peritoneal/omental deposits. It revealed anechoic ascites and multiple hyperechoic loose floating structures suggestive of peritoneal/omental deposits [Figure 1a, b and Video 1]. EUS-guided FNA with 22-gauge needle (Expect; Boston Scientific, Natick, Massachusetts, USA) from omental deposits was performed [Figure 2a and Video 1]. Cytopathology showed epithelial cells with moderate atypia with abundant mucin confirming the diagnosis of pseudomyxoma peritonei [Figure 2b]. The

patient underwent cytoreductive surgery with heated intraperitoneal chemotherapy but unfortunately he died.

Pseudomyxoma peritonei is an uncommon clinical entity with an estimated incidence of 1–2/million/year. It is characterized by diffuse intra-abdominal gelatinous collections (jelly belly) with mucinous implants on peritoneal surfaces and the omentum. The origin of tumor is appendix or ovary. Symptoms are nonspecific; abdominal pain and distension are the most common presenting manifestations.^[1] The imaging and staging modality of choice is CECT of the abdomen, with scalloping and characteristic patterns of disease on visceral surfaces being almost pathognomonic of pseudomyxoma peritonei.^[2] In the majority of cases, pseudomyxoma peritonei is an incidental finding at exploratory laparotomy or laparoscopy, which remains the main diagnostic tool for accurately diagnosing pseudomyxoma peritonei. In a series of four patients, it has been shown that EUS-FNA of peritoneal lesions is a safe, minimally invasive alternative for tissue diagnosis in

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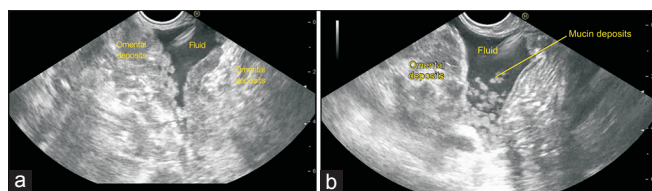


Figure 1. (a and b) Endoscopic ultrasonography image showing hyperechoic omental deposits with anechoic ascites

ascites of unknown etiology.^[3] We describe an interesting case where EUS-guided FNA of the omental deposits helped in the diagnosis of pseudomyxoma peritonei.

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Conflicts of interest

There are no conflicts of interest.

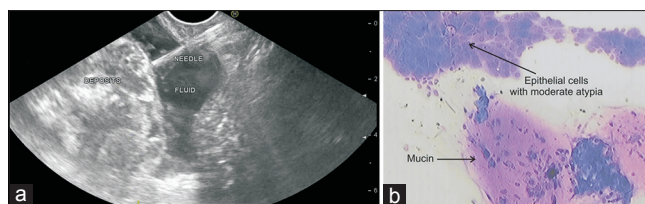


Figure 2. (a) Hyperechoic omental deposits punctured with endoscopic ultrasonography-fine needle aspiration (b) Histopathological image showing epithelial cells with moderate atypia with abundant mucin

REFERENCES

1. Bevan KE, Mohamed F, Moran BJ. Pseudomyxoma peritonei. *World J Gastrointest Oncol* 2010;2:44-50.
2. Chauhan A, Patodi N, Ahmed M. A rare cause of ascites: Pseudomyxoma peritonei and a review of the literature. *Clin Case Rep* 2015;3:156-9.
3. Peter S, Eltoum I, Eloubeidi MA. EUS-guided FNA of peritoneal carcinomatosis in patients with unknown primary malignancy. *Gastrointest Endosc* 2009;70:1266-70.