

LETTER

Fine Needle Aspiration Biopsy and/or Tissue Biopsy for Avoiding Surgery Complication in Patients with Peripancreatic Tuberculosis

Enver Ilhan

Department of General Surgery, Izmir Bozyaka Training and Researching Hospital. Izmir, Turkey

Dear Sir,

Peripancreatic tuberculosis is rarely seen. It is more widespread in countries with high endemicity for tuberculosis than in developed countries and the immunocompromised population. It may mimic a carcinoma of the pancreas, acute pancreatitis or chronic pancreatitis, or present with biliary obstruction [1, 2]. Diagnosing pancreatic tuberculosis is often difficult. Histopathological or microbiological evaluation can confirm the etiology. Ultrasound, CT scan and endoscopic ultrasound (EUS), guided aspiration and definitive tissue diagnosis are feasible techniques. Image-guided FNA biopsy of the pancreas, a safe procedure, has an overall sensitivity of 64-98%, a specificity of 80-100% and a positive predictive value of 98.4-100%. When fine needle aspiration cytology (FNAC) and polymerase chain reaction (PCR) were combined, the sensitivity and specificity increased to 84% and 100%, respectively. EUS is today considered to be the most suitable investigative tool for differentiating a benign from a malignant pancreatic lesion. EUS provides an accurate and safe diagnosis without the risk, cost and time delay involved in an open biopsy or laparotomy. When not available, expensive investigations such as CECT and MRI with guided biopsy have to be resorted to. Exploratory laparotomy may be required in technically difficult cases due to the risk of injury to vessels in the vicinity of the mass [3, 4].

In the article published by Tewari *et al.* in the March 2009 issue of Journal of the Pancreas (JOP) [5], a 70-

year-old woman presented to the hospital with complaints of abdominal pain and vomiting, and mild jaundice. Ultrasound, computed tomography and ERCP revealed intrahepatic biliary radical dilatation and a dilated common bile duct and with no lymph nodal involvement. Upper gastrointestinal endoscopy revealed a slightly deformed ampulla, with a suspected growth, but its biopsy was unremarkable. In the presence of these findings, wide local excision of the ampullary growth under general anesthesia was proposed, but a Whipple pancreaticoduodenectomy was performed instead because the patient was in poor condition with a compromised nutritional state.

The article successfully concluded that local excision of the lesion of the ampulla in their patient was satisfactory and it was recommended as a general therapeutic approach for the elderly with poor performance status. Nevertheless, it is known that peripancreatic tuberculosis is a benign disease and can be treated medically. At the present day, even conditions which require serious surgical intervention can be treated with minimal invasive surgical procedures. In such patients, particularly in endemic areas, the need for repeated aspiration and definitive biopsies, accompanied by ERCP, ultrasonography, CT and EUS should be pointed out. Emphasis on the need for preoperative FNAC and tissue biopsy will help avoid unnecessary surgical intervention for many patients and the morbidity and mortality of serious operations, such as wide local excision of the ampulla of Vater or pancreaticoduodenectomy. It will also play a significant role in patient survival.

In conclusion, isolated pancreatic tuberculosis is a rare entity and can be clinically elusive. An experienced eye is required to diagnose peripancreatic tuberculosis based on clinical and laboratory features. Fine needle aspiration cytology and definitive biopsy are the primary techniques used for reaching a definitive diagnosis and avoiding surgical complications in people living in an endemic area who present with pancreatic mass lesions and an obstructed biliary

Received April 1st, 2009 - Accepted April 2nd, 2009

Key words Biopsy; Cytology; Pancreas; Tuberculosis

Correspondence Enver Ilhan

46/27 Sok. No:24, Da:12 Esentepe, Karabağlar, Izmir, Turkey

Phone: +90-0.232.255.5488; Fax: +90-0.232.250.2997

Mobile: +90-0.505.253.4498

E-mail: drenverilhan@yahoo.com

Document URL <http://www.joplink.net/prev/200905/18.html>

system. The possibility of tuberculosis should be considered in making a differential diagnosis when a tumoral mass is located in the peripancreatic region.

Conflict of interest The authors have no potential conflicts of interest

References

1. Foo FJ, Verbeke CS, Guthrie JA, Ala A, Menon KV. Pancreatic and peripancreatic tuberculosis mimicking malignancy. JOP. J Pancreas (Online) 2007; 8(2):201-5. [PMID 17356244]

2. Ilhan E, Erkan N, Yildirim M, Polat AF, Cirak K, Sezgin A. Diagnostic difficulties in peripancreatic tuberculous lymphadenitis: a case report. Turk J Gastroenterol 2006; 17:137-9. [PMID 16830300]

3. Cherian JV, Somasundaram A, Ponnusamy RP, Venkataraman J. Peripancreatic tuberculous lymphadenopathy. An impostor posing diagnostic difficulty. JOP. J Pancreas (Online) 2007; 8(3):326-9. [PMID 17495362]

4. Manitchotpisit B, Kunachak S, Kulapraditharom B, Sura T. Combined use of fine needle aspiration cytology and polymerase chain reaction in the diagnosis of cervical tuberculous lymphadenitis. J Med Assoc Thai 1999; 82:363-8. [PMID 10410498]

5. Tewari M, Mishra RR, Kumar V, Kar AG, Shukla HS. Isolated tuberculosis of the ampulla of vater masquerading as periampullary carcinoma: a case report. JOP. J Pancreas (Online) 2009; 10(2):184-6. [PMID 19287114]
