

Photoclinic

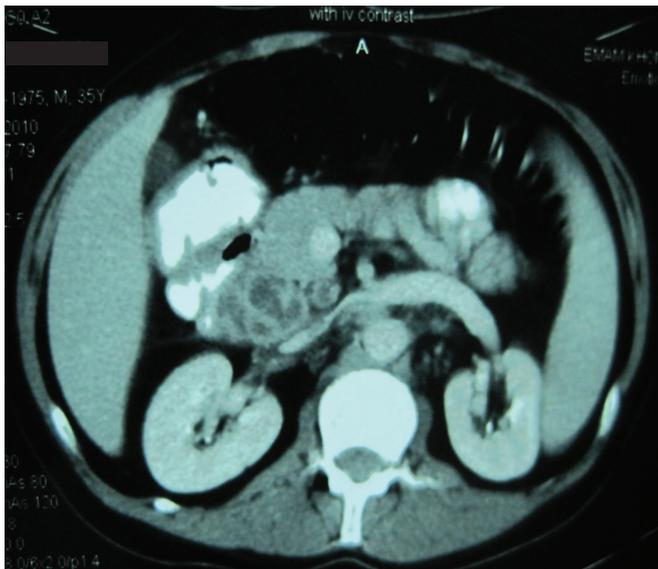


Figure 1. Multiloculated hypoattenuated cystic lesion in the head of pancreas on abdominal CT scan.



Figure 2. Bilateral multiple nodular pulmonary lesions on chest CT.

Cite this article as: Hedayat Yaghoobi M, Abdiliae Z, Alijani N, Ghaemi O, Dehghan Manshadi SA. Photoclinic. *Arch Iran Med.* 2014; **17**(6): 455 – 456.

A 35-year-old man was admitted to hospital with fever, cough, epigastric abdominal pain, significant weight loss and night sweats from last month. He had been IDU (Injection Drug User) for ten years. Chest X-ray showed linear densities in left and right lower parts of the lung. Sonographic imaging showed a 30 × 50^{mm} hypochoic and heterogeneous lobulated mass in the head of

Mojtaba Hedayat Yaghoobi MD¹, Zahra Abdiliae MD¹, Neda Alijani MD¹, Omid Ghaemi MD², Seyed Ali Dehghan Manshadi MD^{•1}

Authors' affiliations: ¹Department of Infectious Diseases and Tropical Medicine, Imam Khomeini hospital, Tehran University of Medical Sciences, Tehran, Iran. ²Imam Khomeini Hospital, Tehran University of medical sciences, Tehran, Iran.

•Corresponding author and reprints: Seyed Ali Dehghan Manshadi MD, Department of Infectious Diseases and Tropical Medicine, Imam Khomeini hospital, Tehran University of Medical Sciences, Tehran, Iran. P.O. Box: 1419733141, Tehran, Iran. Telefax: +98-21-66581598, E-mail: a_dehghanm@razi.tums.ac.ir; a_dehghanm@sina.tums.ac.ir

pancreas. Based on risk factors for HIV infection, HIV antibody test was done, which was reactive and confirmed with western blot test. His CD₄ count was below 10. An abdominal computed tomography (CT) scan showed a multiloculated hypoattenuated cystic lesion in the head of pancreas, measuring 40^{mm} × 30^{mm} (Figure 1). A CT-guided FNA was performed. The cytological examination revealed macrophage without malignant cell and aspirated fluid was negative for acid fast bacilli staining. Moreover, a chest CT scan revealed multiple bilateral nodular pulmonary lesions (Figure 2).

**What is your diagnosis?
See the next page for diagnosis.**

Photoclinic Diagnosis:

Peripancreatic Tuberculosis with Pulmonary TB Mimicking a Pancreatic Mass

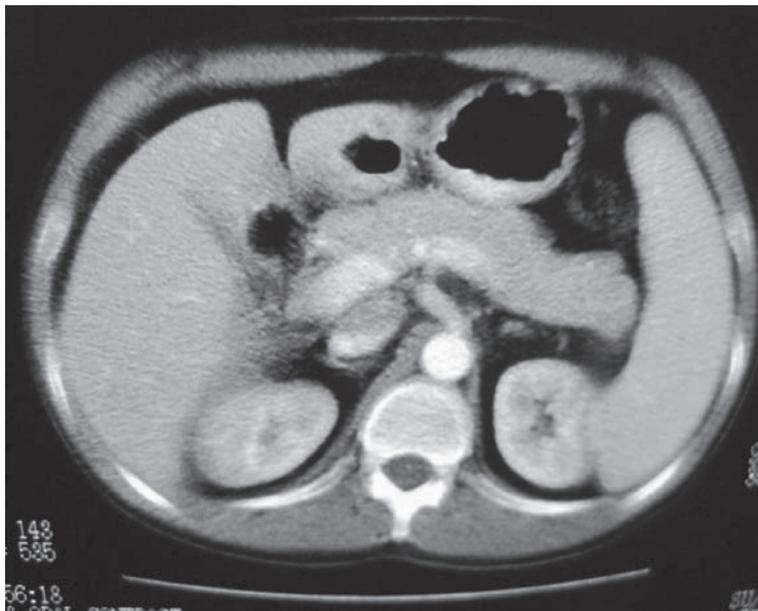


Figure 3. Abdominal CT scan six month later did not reveal any mass lesion in the head of pancreas.

Acid fast bacilli (AFB) were found in the sputum in Ziehl-Neelsen staining and peripancreatic tuberculous lymphadenitis was considered. Anti-tuberculosis therapy with isoniazid, rifampin, pyrazinamide and ethambutol was started based on the sputum result. The patient responded to antituberculous treatment. Abdominal CT scan six months later did not reveal any mass in the head of pancreas (Figure 3).

The presented case demonstrates abdominal TB mimicking a pancreatic mass. The differential diagnosis of cystic pancreatic mass is vast and includes lymphoma, serous cystadenomas, intraductal papillary mucinous neoplasms, mucinous cystic neoplasia, pancreatic islet cell tumors, and pancreatic pseudocysts. Pancreatic TB and peripancreatic TB lymphadenitis are relatively rare disorders with increasing prevalence in recent years.^{1,2} The diagnosis of the disease is difficult in many patients with various differential diagnoses, especially pancreatic tumors. However, if physicians consider pancreatic TB as a possibility in patients with pancreatic masses and be aware of the clinical features and diagnostic methods, pancreatic TB can be effectively treated with anti-tuberculosis drugs.³ The biopsy techniques are endoscopic ultrasound (US)-guided biopsy, CT/US-guided percutaneous biopsy, and surgical biopsy (open or laparoscopic). A review has shown that the three mentioned biopsy approaches are the same in

case of pancreatic masses.⁴ The success rate of FNA is estimated at 50%; AFB is only seen in 20%-40% of the cases. Although abdominal TB can be managed by pharmacotherapy alone, invasive procedures are often applied before making the final diagnosis and this may sometimes lead to unnecessary interventions and delayed treatment.^{1,2}

In conclusion, peripancreatic tuberculosis should be considered in the differential diagnosis of pancreatic head cystic lesions. Peripancreatic tuberculosis can be managed successfully by medical treatment without any invasive intervention.

References

1. Weiss ES, Klein WM, Yeo CJ. Peripancreatic tuberculosis mimicking pancreatic neoplasia. *J Gastrointest Surg.* 2005; **9**: 254 – 262.
2. Meesiri S. Pancreatic tuberculosis with acquired immunodeficiency syndrome: a case report and systematic review. *World J Gastroenterol.* 2012; **18**(7): 720 – 726.
3. Xia F, Poon RTP, Wang SG, Bie P, Huang XQ, Dong JH. Tuberculosis of pancreas and peripancreatic lymph nodes in immunocompetent patients: experience from China. *World J Gastroenterol.* 2003; **9**(6): 1361 – 1364.
4. Mallery JS, Centeno BA, Hahn PF, Chang Y, Warshaw AL, Brugge WR. Pancreatic tissue sampling guided by EUS, CT/US, and surgery: a comparison of sensitivity and specificity. *Gastrointest Endosc.* 2002; **56**: 218 – 224.