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EDITORIAL
Tuberculosis: A pathology where clinical and radiological findings are never a surprise

Tüberküloz: Klinik ve laboratuar bulgularının asla sürpriz olmadığı bir patoloji

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Tuberculosis (TB) continues to be a serious public health problem, especially in developing countries. The World Health Organization (WHO) data shows its prevalence and incidence to be 206/100,000 and 139/100,000, respectively. According to WHO estimates, 1.77 million people or 26.8 of every 100,000 people died due to TB in 2007. Of these, 456,000 were also infected with human immunodeficiency virus (HIV). Of the calculated 2 million deaths of HIV (+) patients in 2007, 23% were related to TB (1). In Turkey, TB incidence was found to be 27/100,000 in 2007. Turkey has a good standing in TB control and has been able to achieve WHO's goal of finding at least 70% of TB-infected patients and treating at least 85% of these, despite various problems.

There are insufficient data with regard to the rate of gastrointestinal and abdominal solid organ TB cases. However, due to immune suppression caused by acquired immunodeficiency syndrome (AIDS) and better imaging modalities, the prevalence of TB has increased in developing and developed countries (2). There are studies showing gastrointestinal TB to make up 3-5% of non-pulmonary TB (3, 4). Data from Turkey show that of 19,694 patients diagnosed with TB in 2007, 6,691 had extra-pulmonary involvement, of which 386 (5.8%) had gastrointestinal tract and peritoneal involvement (5).

Pancreas and biliary TB are very rarely seen, with peritoneal and ileocecal intestinal involvement being the more common forms of abdominal TB. In this journal, two cases of abdominal TB (1 case each of hepatobiliary and pancreatic TB) are published.

In the first case, apart from hepatic and peripheral lymph node involvement, there were signs of cholestasis and findings on ultrasonography of widening of the intrahepatic bile ducts; sclerosing cholangitis-like image plus adhesions and widening in both intra- and extrahepatic bile channels were observed on endoscopic retrograde cholangiopancreatography (ERCP). Despite hepatic involvement being common in disseminated TB, biliary involvement is rare. A study published in 2006 reported 16 cases of biliary TB causing obstructive jaundice (6). In all but five cases, a laparotomy was performed to rule out malignant tumors. In the case published in this journal, hepatic and peripheral lymph node involvement confirmed by biopsy made a more invasive procedure unnecessary. Despite a good prognosis for medical treatment in TB with biliary involvement, the possibility of permanent stenosis requiring stent placement warrants follow-up.

The second case in this journal is that of a patient with pancreatic TB presenting with a retroperitoneal mass. Pancreas TB is very rarely seen. Most cases in the literature are reported from areas where TB is endemic (7). Pancreas TB usually presents with non-specific symptoms such as fever, abdominal pain, weight loss, and anorexia (8). The clinical presentation may also be obstructive jaundice, a pancreatic mass mimicking a tumor, pancreatic abscess, or gastrointestinal bleeding. The reported case presented with obstructive jaundice

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and a mass of the pancreatic head. CT findings are generally hypodense lesions of the head of the pancreas and increase in size of pancreatic or peripancreatic lymph nodes (9).

However, computerized tomography (CT) may be ineffective in separating these enlarged lymph nodes from masses involving the pancreas itself. In such cases, magnetic resonance (MR) is a useful imaging modality (10). In T2-weighted images, the presence of low-density lesions can be due to the presence of free radicals produced by macrophages in active phagocytosis. This finding can help in separating other neoplastic or inflammatory lesions, which appear in higher density on T2-weighted images (11). Especially in immunosuppressed patients, early diagnosis and treatment are important in preventing complications. Diagnosis should be made by surgical biopsy or needle biopsy performed under ultrasound or CT guidance.

The locations of abdominal TB and its clinical presentation can vary and can rarely be estimated. TB should always be considered in patients living in an endemic region and/or if the patient is immunosuppressed, in order to make an early diagnosis, begin treatment and prevent complications. In order to be successful, a directly observed treatment (DOT) must be performed in cooperation with TB control units.

REFERENCES

1. Global tuberculosis control: surveillance, planning, financing. WHO report 2009. Geneva: World Health Organization (WHO/HTM/TB/2009.376).
2. Mehta JB, Dutt A, Harvill L, Mathews KM. Epidemiology of extrapulmonary tuberculosis: a comparative analysis with pre-AIDS era. Chest 1991; 99: 1134–8.
3. Hamer DH, Gorbach SL. Tuberculosis of the intestinal tract. In: Felman M, Scharschmidt BF, Sleisenger MH, eds. Sleisenger and Fordtran's gastrointestinal and liver disease. Pathophysiology/diagnosis/management. 6th ed. Vol 2. Philadelphia: WB Saunders, 1998; 1622-4.
4. Marshall JB. Tuberculosis of the gastrointestinal tract and peritoneum. Am J Gastroenterol 1993; 88: 989-9.
5. Türkiye'de Verem Savaşı, 2009 Raporu. Verem Savaşı Dairesi Başkanlığı. Ankara: 2008.
6. Iwai T, Kida M, Kida Y, et al. Biliary tuberculosis causing cicatricial stenosis after oral antituberculosis therapy. World J Gastroenterol 2006; 12(30): 4914-7.
7. Lo SF, Ahchong AK, Tang CN, Yip AW. Pancreatic tuberculosis: case reports and review of the literature. J R Coll Surg Edinb 1998; 43: 65-8.
8. Desai DC, Swaroop VS, Mohandas KM, et al. Tuberculosis of the pancreas: report of three cases. Am J Gastroenterol 1991; 86: 761-3.
9. Pombo F, Diaz-Candamio MJ, Rodriguez E, Pombo S. Pancreatic tuberculosis: CT findings. Abdom Imaging 1998; 23: 394-7.
10. Kim SY, Kim MJ, Chung JJ, et al. Abdominal tuberculous lymphadenopathy: MR imaging findings. Abdom Imaging 2000; 25: 627–32.
11. Murata Y, Yamada I, Sumiya Y, et al. Abdominal macronodular tuberculomas: MR findings. J Comput Assist Tomogr 1996; 20: 643–6.