

Case Report

A case of abdominal tuberculosis presenting as obstructive jaundice

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ABSTRACT

Extrapulmonary tuberculosis is notorious for its many manifestations, which can lead to delayed diagnosis and treatment. In particular, abdominal tuberculosis is easily overlooked because the incidence is low and because it can mimic common non-infectious abdominal syndromes. We describe here a 45-year-old female presenting with obstructive jaundice. In this patient, a pancreatic mass was found and tuberculosis was first diagnosed after a diagnostic laparoscopic. Tuberculosis should be included in the differential diagnosis of intra-abdominal mass lesions, especially in persons originating from regions where tuberculosis is endemic. Invasive procedures are often required to obtain adequate diagnostic samples.

Keywords: Mycobacterium tuberculosis, Extrapulmonary TB, Jaundice, Portal hypertension

INTRODUCTION

Abdominal tuberculosis (TB) is an infrequent diagnosis that can manifest itself in various ways but very rarely presents with jaundice. Obstructive jaundice secondary to tuberculosis due to inflammatory stricture of the main biliary duct, enlargement of pancreas head due to tuberculosis, and retroperitoneal abscess of tuberculosis.¹ Pericholedocal tuberculous lymphadenitis rarely occurs due to rupture of tuberculosis granuloma to biliary ducts, directly epithelium and pericholangitis.² Thus, it is a challenge for clinicians not to miss a rare manifestation of an uncommon disease. It is usually seen in four forms: TB lymphadenitis, peritoneal tuberculosis, gastrointestinal tuberculosis and visceral tuberculosis.³⁻⁵ A good way to not miss a rare cause to have thorough knowledge of differential. Intra-abdominal tuberculosis can occur due to lymphatic, pleural, genitourinary, bone and joint, miliary and meningeal spread.⁶ Therefore, we present here this patient with common abdominal syndromes that were caused by Tuberculosis is still

common in developing countries especially Indian continent approximately 12% of patients with tuberculosis have gastrointestinal tract involvement. Mesenteric lymph nodes, small bowel, peritoneum, liver, and spleen are the organs most frequently involved. However, tuberculosis infection of the pancreas is rare. The incidence of pancreatic tuberculosis is only between 2.1% and 4.7%, even in autopsies of patients with miliary tuberculosis. We present a rare case of pancreatic tuberculosis with genital tuberculosis with obstructive jaundice. Most commonly seen tuberculosis lymphadenopathies are mesenteric nodes, omental nodes, those at porta hepatis, those along celiac axis and those localized at peripancreatic area.⁷

CASE REPORT

A 45-year-old female was admitted in the gynecology department with pain in abdomen since one and half year on and off dull aching in nature increased in intensity since 15 days associated with dark yellow colored urine since 15 days.

Table 1: Classification of abdominal tuberculosis.

Tubercular lymphadenopathy	Peritoneal tuberculosis	Visceral tuberculosis	Gastrointestinal tuberculosis
	Acute	Liver tuberculosis	Esophageal tuberculosis
Chronic; wet ascitic type, fixed fibrotic type, dry plastic type, encysted/ loculated type	Splenic tuberculosis	Jejunal and ileocaecal tuberculosis	
	Pancreas	Duodenal tuberculosis	
		Colorectal tuberculosis	

History of weight loss since six months, no history of previous surgery or any comorbidity. Surgery reference was given in view of jaundice. On Examination abdomen was soft non tender no guarding rigidity or lump. Blood Investigations are as follows; CBC Hb-9.75, WBC-9630, Plt-5.54 lacs, PT-16.0, INR-1.18, APTT-47.3, LFT total bilirubin-5.5, direct bilirubin-4.8, AST-61, ALT-55, ALP-405, RFT urea-18, creat-0.5, Na-140, K-4.6, Cl-103, Special Investigations. CA 125-377.6, CA19-9 -300. Blood investigations were suggestive of obstructive jaundice.

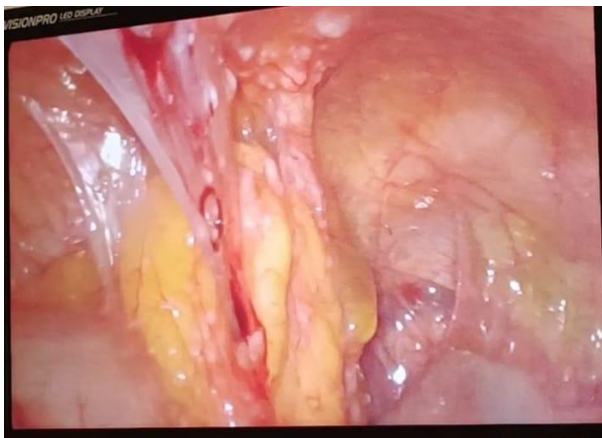


Figure 1: Suggestive of peritoneal deposits.



Figure 2: Suggestive of pus draining from the right ovary.

Radiological investigation

Ultrasonography of abdomen and pelvis suggestive of bilateral bulky ovaries with echogenic lesion near head of

pancreas. CT abdomen and pelvis suggestive of a well-defined heterogenous soft tissue density lesion in head of pancreas with bilateral tubo-ovarian mass. Whole body PET CT scan suggestive of metabolically active soft tissue mass along periportal and peri duodenal region with multiple areas of air foci within which characteristic of infective etiology. Metabolically active soft tissue deposits along posterior surface of liver. Metabolically active bilateral adnexal mass. In view of the radiological findings the differentials were a neoplastic growth with mets and EPTB hence an OGDscopy was done. OGD Findings; a mass was seen in 2nd part of Duodenum trans duodenal biopsy was taken and sent for histopathologic examination which was; Histopathology examination of biopsy from first part of duodenum suggestive of chronic inflammation with focal granulomatous reaction. The patient was planned for diagnostic laparoscopy. Intra op Findings- Peritoneum studded with multiple deposits along with bilateral bulky ovaries. Peritoneal biopsy with right oophorectomy done to differentiate tubercles from metastasis. Biopsy sent for GENE Xpert to rule out EPTB. Gene Xpert was Positive for TB. Histopathological examination of right ovary biopsy was suggestive of granulomatous inflammation favoring tuberculosis. Post-op patient started with empirical anti-tubercular therapy.

Post-operative labs results

CBC Hb-9.95, WBC-8370, Plt-4.88 lacs, PTINR pt-15.4, INR-1.13, APTT-42.3, LFT total bilirubin-1.1, direct bilirubin 0.8, AST-21, Alt-15, ALP-117, RFT urea-14, creat-0.7, Na-140, K-5.0, Cl-103. Significant Improvement in the general condition and LFT's was noted. The patient was discharged and advised to continue ATT for 18 months.

DISCUSSION

Mycobacterium tuberculosis infection still represents one of the major causes of death worldwide, as well as being the leading cause from a single infectious agent.⁸ Abdominal TB can present as peritoneal TB, tuberculous lymphadenopathy, gastrointestinal TB and visceral TB.⁹ Though gastrointestinal TB more commonly involves the ileocecal region, it can affect any part of GI tract. The symptoms of abdominal TB can be nonspecific. Multiple imaging and radiological signs are useful for diagnosis of abdominal TB. A high degree of clinical suspicion is required to make a diagnosis of TB in those areas which are rarely involved. Various molecular and immunological techniques are increasingly used for rapid

diagnosis in suspected cases of abdominal TB. Gastrointestinal TB is generally managed with medical therapy with anti-tuberculous drugs and surgeries are reserved for conservative management and are done only if absolutely indicated. Abdominal tuberculosis classification is depicted in (Table 1).⁴

CONCLUSION

This patient presented with bile duct obstruction as an unusual manifestation of TB caused by the mass effect pancreatic head tuberculosis. In this patient, diagnostic laparoscopy was required to obtain adequate diagnostic samples to differentiate between malignancy and infection. Of all patients with TB, 15-20% will present with an extrapulmonary localization. Intra-abdominal TB is preceded in frequency by lymphatic, pleural, genitourinary, bone, Abdominal tuberculosis most frequently manifests as peritoneal deposits, hepatitis, or involvement of the intra-abdominal lymph nodes. Rare manifestations are tuberculous enteritis, bowel tuberculoma, and involvement of the liver, biliary tract, spleen, or pancreas.

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REFERENCES

1. Colovic R, Grubor N, Jesic R, Micev M, Jovanovic T, Colovic N, et al. Tuberculosis lymphadenitis as a cause of obstructive jaundice: a case report and

- literature review. World J Gastroenterol. 2008;14:3098-100.
2. Cheng VC, Ho PL, Lee RA, Chan KS, Chan KK, Woo PC, et al. Clinical paradoxical deterioration during antituberculosis therapy in non-HIV-infected patient. Eur J Clin Microbiol Infect Dis. 2002;21:803-9.
3. Global Tuberculosis Control. Available at: http://www.who.int/tb/publication/global_report/2018/gtbr11_full.pdf. Accessed on 21 June 2018.
4. Sharma K, Sinha SK, Sharma A, Nada R, Prasad KK, Goyal K, et al. Multiplex PCR for rapid diagnosis of gastrointestinal tuberculosis. J Glob Infect Dis. 2013; 5:49-53.
5. Chaudhry P. Hepatobiliary tuberculosis. Ann Gastroenterol. 2014;27:207.
6. Fain O, Lortholary O, Lascaux VV, Amoura I, Babinet P, Beaudreuil J, et al. Extrapulmonary tuberculosis in the northeastern suburbs of Paris: 141 cases. Eur J Intern Med. 2000;11(3):145-50.
7. Alvarez SZ. Hepatobiliary tuberculosis. Phil J Gastroenterol. 2006;2:1-10.
8. Global tuberculosis report. Available at: <http://www.who.int>. Accessed on 20 November 2023.
9. Debi U, Ravisankar V, Prasad KK, Sinha SK, Sharma AK. Abdominal tuberculosis of the gastrointestinal tract: revisited. World J Gastroenterol. 2014;20(40):14831-40.

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