

Obstructive Jaundice Due to Tuberculosis of Distal CBD and Periapillary Region Mimicking Cholangiocarcinoma

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ABSTRACT

Abdominal tuberculosis (TB) commonly affects the intestinal tract, lymph nodes, peritoneum, and solid organs in varying combinations. Hepatobiliary or pancreatic TB is rare and the preoperative diagnosis is difficult. Though rare, there have been a few citations of intrahepatic tuberculosis, but isolated bile duct tuberculosis is extremely rare. Here we report a case of obstructive jaundice which was initially thought to be due to lower-end cholangiocarcinoma but postoperatively it was found to be tuberculosis.

KEYWORDS: Bile ducts, obstructive jaundice, tuberculosis

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BACKGROUND

Abdominal tuberculosis (TB) commonly affects the intestinal tract, lymph nodes, peritoneum and solid organs in varying combinations. Hepatobiliary or pancreatic TB is rare and the preoperative diagnosis is difficult. There are few citations of intrahepatic tuberculosis, but isolated bile duct tuberculosis is extremely rare. We report a case of obstructive jaundice due to tuberculosis of distal common bile duct (CBD) and periapillary region with clinical features mimicking cholangiocarcinoma.

CASE REPORT

A 55 year old north Indian male patient presented with history of painless progressive jaundice for 6 months and few episodes of intermittent fever for 3 months. There was loss of appetite and weight loss of 5 kg over the previous 6 months. There was no history of hematemesis or malaena. The patient did not drink alcohol, was a non smoker, and nondiabetic.

His performance status was 80% on Karnofsky scale. On clinical examination, the patient was deeply jaundiced with pallor; no lymph nodes were palpable. He had mild hepatomegaly with palpable gallbladder. Blood parameters were as follows: Hemoglobin 8.9 g%, total bilirubin 18.4 mg/dl (conjugated 12.4, unconjugated 6.0), alkaline phosphatase 850, aspartate aminotransferase 110, alanine aminotransferase 85. Viral markers

for hepatitis were nonreactive. Serology for HIV I and II was nonreactive.

Ultrasonography showed dilated proximal (CBD) with dilated intrahepatic biliary radicles and soft tissue shadow in lower end of CBD. There were multiple echogenic shadows in proximal CBD.

Endoscopic retrograde cholangio pancreatogram (ERCP) revealed a stricture at the lower end of CBD, biliary stenting was not possible through the tight stricture.

Magnetic resonance cholangio pancreaticogram (MRCP) showed soft tissue lesion in the terminal end of CBD suggestive of cholangiocarcinoma.

Guided FNA from the lesion for cytological evidence was not carried out.

Surgical resection for lower end CBD stricture was planned and a pylorus preserving pancreaticoduodenectomy (PPD) was successfully carried out. Intraoperative findings did not suggest any metastasis or stigma of tuberculosis.

Postoperative recovery was complicated by minor pancreatic leakage and wound infection. Oral feeding (fluids) was resumed on third postoperative day and the patient was able to eat normal diet by 7th postoperative day. Within 2 weeks, the pancreatic leakage dried up and abdominal drains were removed.

Histopathology revealed granulomatous inflammation at lower end of CBD and periampullary region along with granulomatous lymphadenitis, both consistent with tuberculosis.

The patient was started on antitubercular medication (four drug regime of INH, rifampicin, pyrazinamide, and ethambutol) without significant adverse effects. He had a steady recovery - his serum alkaline phosphatase and bilirubin level reaching normal values by 8th postoperative week.

The patient is on follow up for the last 7 months, has gained weight and doing well.

DISCUSSION

Abdominal tuberculosis is common in the Indian subcontinent and tropical countries. It usually affects intestine, mesentery, lymph nodes, and peritoneum, but involvement of hepatobiliary system is rare. Isolated tubercular involvement of common bile duct and ampulla is extremely rare and only a few cases have been reported in published literature.^[1-5]

Tuberculosis of lower end of common bile duct and periampullary region often forms pseudotumor^[6] and strictures mimicking cholangiocarcinoma. Clinically the patients present with features of obstructive jaundice. Preoperative diagnosis of tuberculosis as the cause of obstructive jaundice is extremely difficult. There are several proposed investigations for accurate preoperative diagnosis, e.g., ERCP with brush cytology and PCR for tuberculosis of the bile sample, FNAC, and frozen section. However, in most of the cases, diagnosis is reached in the postoperative period by the histological finding of caseation necrosis and epithelioid granuloma formation.

The disease responds well to antitubercular medications. Diagnostic difficulties often compel major resectional surgery

such as pancreatoduodenectomy and final diagnosis is established with histopathology. However, if preoperative diagnosis is established, major surgery can be avoided and the disease cured with antitubercular medications.^[7] Prognosis is excellent.

CONCLUSION

Tuberculosis should be considered as a cause of obstructive jaundice in endemic regions.

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