

CASE REPORT

Co-Existence of Peri-Ampullary Carcinoma with Peripancreatic Tuberculous Lymphadenopathy

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ABSTRACT

Context Pancreatic tuberculosis and peripancreatic tuberculous lymphadenitis are rare, mimicking various pathologies of the pancreas. The coexistence of peri-ampullary malignancy with peripancreatic tuberculous lymphadenitis has not been reported.

Case report We present the case of a young woman who had been operated on with a preoperative diagnosis of peri-ampullary adenocarcinoma in whom a frozen section of regional lymph nodes revealed tuberculosis. The final pathology confirmed the co-existence of tuberculosis with malignancy. The patient made an uneventful recovery.

Conclusion In countries with high endemicity for tuberculosis, the co-existence of malignancy and tuberculosis should be considered and resection, which is the only chance for cure, should not be abandoned due to observations based solely on frozen sections.

INTRODUCTION

Pancreatic tuberculosis and peripancreatic tuberculous lymphadenitis are rare clinical entities. Pancreatic tuberculosis often mimics pancreatic cancer, pancreatic abscess, cystic

tumors of the pancreas, pseudocysts of the pancreas or chronic pancreatitis with head mass on preoperative non-invasive diagnostic tests [1]. Peripancreatic tuberculous lymphadenitis mimicking pancreatic pseudotumor is also reported in the literature [2]. However, the coexistence of peri-ampullary malignancy with peripancreatic tuberculous lymphadenitis has not been reported. We report the case of a young woman presenting with peri-ampullary carcinoma associated with tuberculous peripancreatic lymphadenitis.

CASE REPORT

A 28 year old woman presented with jaundice, pruritus and alcoholic stools alternating with melena of one month duration. She had had abdominal pain with radiation to the back and vomiting for one year. She had lost significant weight in the month before. On examination, she had icterus, scratch marks and palpable gallbladder.

On admission, serum total bilirubin was 11.3 mg/dL (reference range: 0.2-1.0 mg/dL), direct bilirubin was 6.9 mg/dL (reference value: less than 0.3 mg/dL) and alkaline phosphatase was 469 IU/L (reference range: 40-120 IU/L). Ultrasonography and a CT scan showed dilatation of the intra and extrahepatic biliary tree and the pancreatic duct but only

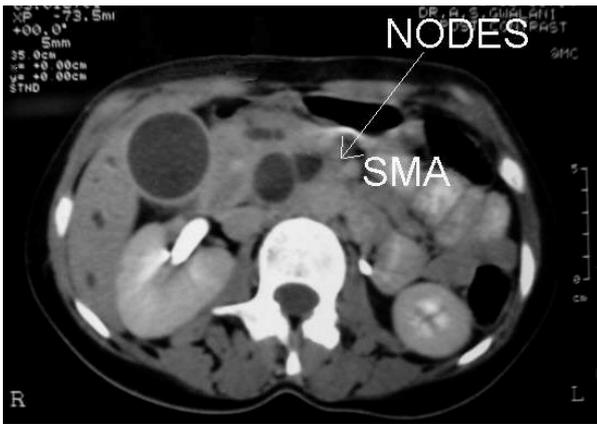


Figure 1. CT scan of the abdomen showing a dilated bile duct and small nodes adjacent to the superior mesenteric artery (SMA).

small lymph nodes (Figure 1). There was no mass in the head of the pancreas. Side-viewing endoscopy revealed an infiltrating growth in the peri-ampullary region extending to the first part of the duodenum. Cannulation of either duct was not possible. Brush cytology and mucosal biopsy revealed adenocarcinoma.

Intraoperatively, there was no evidence of liver or peritoneal metastasis. A mass was palpable in the peri-ampullary region. There was extensive peripancreatic lymphadenopathy (Figure 2). A frozen section of these nodes suggested tuberculosis. Whipple's procedure was performed in view of the earlier biopsy report of adenocarcinoma. Her postoperative recovery was uneventful. She was discharged on four-drug antituberculous



Figure 2. Intraoperative photograph following roux loop pancreaticojejunostomy showing an enlarged node in the bowel mesentery (arrow).

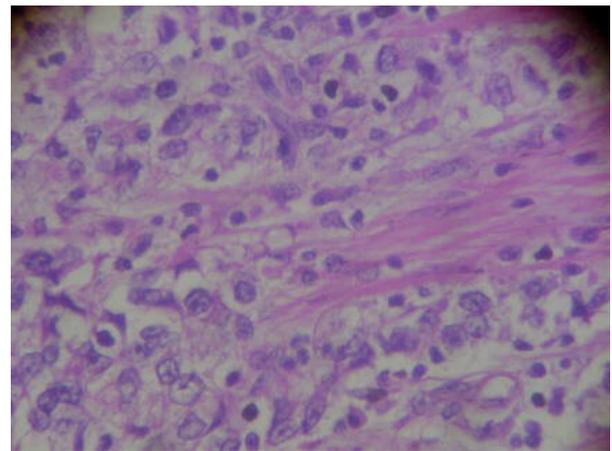


Figure 3. Histopathology of the ampullary mass; poorly differentiated adenocarcinoma

therapy and was doing well on follow-up two months later.

Histopathology confirmed high-grade adenocarcinoma in the peri-ampullary region (Figure 3) infiltrating transmurally, reaching up to the serosa and infiltrating pancreatic lobules peripherally. A peripancreatic lymph node showed multiple caseating epithelioid granulomas with Langhans' type giant cells (Figure 4).

DISCUSSION

The incidence of pancreatic tuberculosis is very low. Even in the presence of miliary tuberculosis, pancreatic tuberculosis accounts for 0-4.7% of cases of abdominal tuberculosis [3, 4]. Pancreatic tuberculosis often mimics

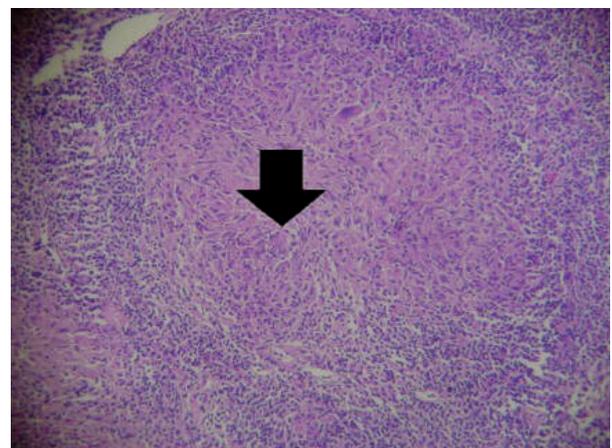


Figure 4. Histopathology of the lymph node showing caseating necrosis and Langhans' type giant cells (arrow).

various pathologies. In the majority of patients, the diagnosis is obtained at laparotomy [5, 6]. There are few reports in literature mentioning isolated peripancreatic and retroduodenal tuberculous lymphadenopathy simulating a pancreatic tumor [2, 7], but no evidence of the coexistence of both [1].

Turan *et al.* [2] reported a case in which a frozen section of a lymph node was inconclusive and, hence, Whipple's procedure was performed; histopathology suggested tuberculosis. On the other hand, laparotomies have been abandoned on the basis of histology suggestive of tuberculosis [8]. In our case, since we had pre-operative brush cytology and biopsy, even though frozen sections of peripancreatic nodes were suggestive of tuberculosis, surgery could be proceeded with.

In countries with high endemicity for tuberculosis, the co-existence of malignancy and tuberculosis should be considered and resection, which is the only chance for cure, should not be abandoned due to observations based solely on frozen sections. If preoperative or intraoperative biopsies are suggestive of this benign pathology, careful follow-up imaging is essential to show regression of the mass on anti-tuberculosis therapy; failing this, the surgical option should be revisited.

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Key words Adenocarcinoma; Mycobacterium tuberculosis; Pancreas; Pancreatic Neoplasms; Tuberculosis; Tuberculosis, Gastrointestinal; Tuberculosis, Lymph Node

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