Pancreatic tuberculosis: A rare occurrence

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mass in the head of the pancreas extending upward and laterally towards the porta hepatitis. It compressed the hepatic artery and inferior vena cava with mild dilatation of the intra and extrahepatic biliary tree and some distension of the gall bladder (Figure 2). An ERCP showed tuberculosis. CT-scan abdomen carried out after completion of chemotherapy showed complete regression of the pancreatic mass (Figure 4). Patient was followed-up for three years after completing the anti-tuberculous chemotherapy with no clinical
There was no single case of pancreatic involvement. Since the patient had previous pulmonary TB, we can speculate that the pancreas could have been secondarily involved by lymphohematogenous route. It remains, however, unclear why the process of reactivation involved the pancreas.

Pancreas becomes involved in miliary TB by the following routes: A toxic-allergic reaction to generalized TB (Concomitant pancreatitis); Direct extension from adjacent caseating lymph nodes; Hematogenous dissemination; Reactivation of old TB focus, particularly in immuno-suppressed patients, e.g. renal transplants and HIV patients. The primary focus could be in the lungs, intestines or skin. The clinical presentations of pancreatic TB is legendarily variable. Patients may present with pancreatitis, obstructive jaundice, pancreatic abscess, GI bleeding, pancreatic insufficiency, pyrexia of unknown origin and others. Our patient presented with abdominal pain, nausea, vomiting, weight loss and obstructive jaundice. Most often the diagnosis is not suspected prior to laparotomy unless there is evidence of TB elsewhere, especially in the lungs.

A normal chest x-ray was reported in 50-80% of patients with abdominal TB. Ultrasound and CT-scan can clearly delineate the pancreatic lesion and whether coeliac and retroperitoneal lymphadenopathy is present, but they are non-specific. The CT scan of our patient clearly demonstrated a mass in the head of the pancreas with different densities and comparison on the duodenum, hepatic artery and inferior vena cava. These features are highly suggestive of a malignant neoplasm.

Pancreatic tissue can be obtained by fine needle aspiration, percutaneous biopsy or during laparotomy and laparoscopy or both.

An ultrasound or CT-guided biopsy is a favorable technique, thus avoiding unnecessary laparotomy. The diagnostic criteria for abdominal TB include a positive tuberculin test, presence of characteristic granuloma in tissue biopsy and demonstrating mycobacteria by staining and culture. Negative tuberculin test occurs in 70% of patients. In this case the tuberculin test and acid-fast, alcohol-fast bacilli staining were negative. Absence of organism does not rule out the diagnosis because negative result is frequent in abdominal TB. However, culture of the biopsy demonstrated the organism after 8 weeks of incubation. The diagnosis was achieved by percutaneous CT-guided biopsy. This is in contrast with most reports where diagnosis of TB was established after exploratory laparotomy. Abdominal TB should be included in the differential diagnosis of many intraabdominal lesions including malignancy, Crohn’s disease and lymphomas.

Acknowledgments. We are indebted to Dr M Al-Khayat, FRCS for his advice and assistance and to Miss Joy U Almeda for her secretarial help.

References