A dilemma between abdominal tuberculosis and malignancy: report of two cases from Nepal

Sudeep Khaniya

Department of Surgery, B.P.Koirala Institute of Health Sciences, Nepal

Introduction:

Tuberculosis (TB) has again become a global disease due to rise of the acquired immunodeficiency syndrome and widespread immigration and use of immunosuppressant drugs. The relationship of tuberculosis and carcinoma has been a matter of confusion. Here we present a case of pancreatic TB mimicking carcinoma, and another case of anorectal TB coexisting with adenocarcinoma.

Case 1:

A 45 year old male presented with 3 months history of progressive jaundice, right upper quadrant pain, weight loss and palpable gall bladder. CT scan showed an inhomogeneous cystic mass of size 3x3 cm in the head and uncinate process of pancreas with peripheral rim enhancement. Exploaratory laparotomy revealed a 3×2 cm mass at the head of pancreas with areas of necrosis, 50 ml of thick pus at the retroduodenal region and multiple enlarged pericholedochal and peripancreatic lymphnodes. With intraoperative diagnosis of pancreatic carcinoma, pancreaticoduodenectomy was done. The histopathology from the pancreatic mass revealed necrotizing granulomatous lesion which was positive for tuberculosis.

Case 2:

A 35 year lady presented with 9 months history of abdominal pain, bleeding per rectum, worsening constipation and weight loss. Rectal examination showed tight, nodular stricture in the lower rectum. Rectal biopsy revealed dysplastic cells with features of non specific chronic inflammation. CT scan of the abdomen and pelvis showed thickened rectal wall with stricture at the lower part. Laparotomy revealed hard stricture in the lower rectum. Patient underwent abdomino-perineal resection, resected specimen showing hypertrophic ulcerated stricture involving the lower rectum and upper anal region with enlarged multiple perirectal lymph nodes. Histopathological examination showed signet-ring adenocarcinoma with caseating granulomas containing epitheloid cells and Langhan's giant cells. The resected lymph nodes showed both metastatic deposit and tuberculous granulomas.

Discussion:

Primary abdominal TB is not uncommon, incidence ranging from 0.58% to 12% and 6–38% patients with active pulmonary TB also have associated abdominal TB. ^{2,3} The disease occurs commonly in patients residing in endemic zones, or in those with immunosuppressant status.

The diagnosis of pancreatic TB is a real challenge, because of rarity of the disease itself and insidious presentation with nonspecific signs and symptoms or clinical similarity with malignancy. There are other reports also where pancreatic TB has not been diagnosed preoperatively.^{2, 4, 5} In Saluja et al study, 4 patients had pancreatic TB and all required operative resection for diagnosis.⁴

Similarly, colonic tuberculosis is rare as well, comprising only 3-4% of intestinal tuberculosis.⁶ Even in colon,

rectum is unusual site, and its association with malignancy is uncommon. The coexistence of tuberculosis and carcinoma in the colon may be simply a coincidence.⁷ Some authors have postulated that malignancy is the primary lesion, followed by secondary tubercular infection of the malignant ulcer, which might have been facilitated by luminal obstruction, impaired cellular immunity and loss of mucosal barrier. ^{8,9} However, others have suggested that the long standing tuberculous ulcer may be carcinogenic. ⁸

Conclusions:

Malignancy and tuberculosis may mimic each other leading to misdiagnosis. Therefore, considering the rise of HIV infection and immigration of people from the endemic regions, awareness of this association should be borne in mind.

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