

Synchronous Colonic Tuberculosis and Adenocarcinoma Colon: A Rare Case Report

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Abstract: A male patient, in his early forties, reported to us with history of irregular bowel habits. Exploratory laparotomy with right hemicolectomy was done. Histopathological examination revealed synchronous adenocarcinoma and tuberculosis of the right colon.

Keywords: adenocarcinoma, colon cancer, tuberculosis

1. Introduction

Carcinoma of the colon is a common condition, more affecting the distal large bowel. Tuberculosis of the gastrointestinal tract can occur anywhere from the mouth to the anal canal, including the pancreato-biliary system. Synchronous existence of adenocarcinoma colon and colonic tuberculosis is rare and very few cases have been reported in the literature. ^[1]

Here, we present a case of colonic adenocarcinoma with co-existing tuberculosis because of its rarity and discuss the possible pathogenesis of these two entities.

2. Case Report

A 43 years old male patient presented to us with features of irregular bowel habits for the last six months. There was no history of loss of appetite or loss of weight. On examination, the patient was afebrile. There was no pallor, icterus, lymphadenopathy and dehydration. CT colonography showed irregular and concentric wall thickening of the ascending colon with pericolic fat stranding and mesenteric lymphadenopathy.

Exploratory laparotomy showed a mass in the hepatic flexure, thickened ascending colon and mesenteric lymphadenopathy. Right hemicolectomy was done and the resected specimen (Figure 1) was sent for histological examination (HPE). HPE showed well differentiated adenocarcinoma of the right colon, infiltrating upto the muscularis propria with pathological staging – pT₂N₀M_x. Features of intestinal (colonic) tuberculosis and tubercular lymphadenopathy, characterized by the presence of discrete epithelioid granuloma, Langhan's giant cells and minimal caseation were also noted (Figures 2&3). No lymphovascular emboli was seen. A total of 12 lymph nodes were dissected. No tumour metastasis was seen in the lymph nodes. Multiple epithelioid granulomas were noted in 9 lymph nodes.



Figure 1

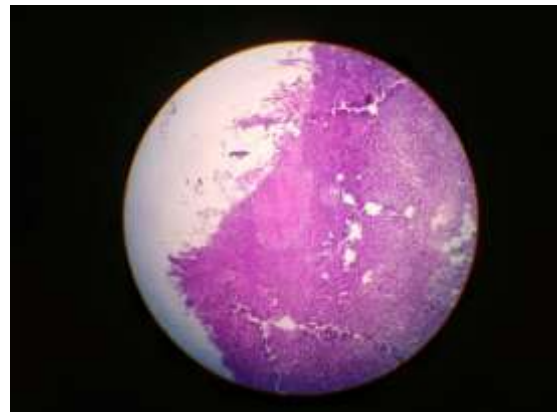


Figure 2

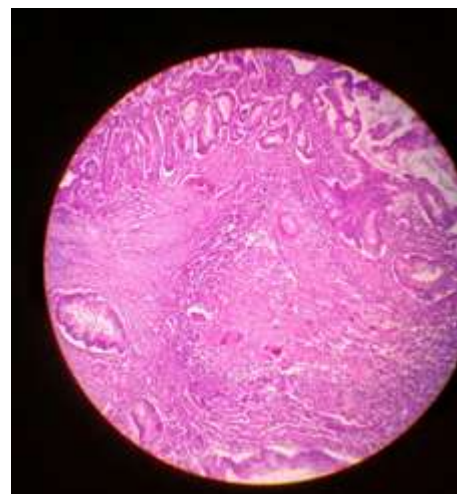


Figure 3

3. Discussion

The abdomen is one of the most common sites of extrapulmonary tuberculosis. It can affect any part of the intestines, lymph nodes, mesentery, peritoneum and solid viscera in the abdomen. ^[2,3]

Commonly, tuberculosis affects the ileocaecal region. This is believed to be due to presence of abundant lymphoid tissue, high rate of absorption and prolonged stasis in the region.

Our patient, in contrast, had a relatively healthy appearing terminal ileum and caecum on exploration, with the lesions limited to the ascending colon and hepatic flexure.

The coexistence of tuberculosis and carcinoma of the colon at the same site is a rare occurrence. It is not known if this is a coincidental finding or whether the presence of one predisposes to development of the other lesion.

It has been theorized that tuberculosis causes an immunosuppressed state allows the colorectal neoplasia to develop. ^[2]

Alternatively, it has been suggested that the presence of immunocompromised state as in a patient of colon cancer leads to reactivation of latent tuberculosis infection. ^[2]

This might have been facilitated by the luminal obstruction, impaired cellular immunity and loss of mucosal barrier. ^[4]

Some other authors have suggested that the presence of chronic inflammatory mucosal damage that initiate a sequence of metaplasia and dysplasia leading to neoplastic change as seen in chronic inflammatory bowel disease like ulcerative colitis and Crohn's disease. The same may be postulated for the ulcerative lesions of intestinal tuberculosis, which may serve as precursors of carcinoma. ^[5,6]

Thus, the presence of tuberculosis may serve as predisposing factor for malignancy, either by lowering immunity or because of chronic ulceration. ^[7]

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