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## ABDOMINAL TUBERCULOSIS WITH SYNCHRONUS COLON CARCINOMA - A CASE REPORT VARUN GANDHI R

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**Abstract** : Coexisting abdominal tuberculosis and colon carcinoma is a rare entity. We had a patient who was diagnosed as a case of carcinoma involving ascending colon, hepatic flexure and transverse colon. Diagnostic laparoscopy followed by an elective laparotomy and extended right hemicolectomy was done. Histopathology showed features of both malignancy and tuberculosis. We reviewed the literature and found that very few cases have been reported and most of them have some common features. World literature reports only 67 cases of tuberculosis (TB) and colonic carcinoma occurring simultaneously. A few examples of the same in the Indian context are on record but adenocarcinoma and tuberculosis occurring same site is exceedingly rare.

Keyword :Intestinal tuberculosis ,Synchronous, Colon carcinoma

## CASE REPORT

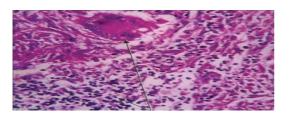
A 35-year old female was admitted with 1 month history of abdominal pain, fever-1 month, watery diarrhoea for 2weeks.Abdominal pain was dull aching, fever was low grade associated with chills and rigor. She also had constitutional symptoms such as anorexia and significant loss of weight. She was symptomatic of anemia with lethargy. Hematological investigations showed microcytic hypochromic anemia. She had no chronic medical illness or any history of tuberculosis. She denied history of night sweat, chronic cough or any contact with pulmonary tuberculosis patient. Also, she had no previous history of surgery. Clinically she was a middle age woman, cachexia, pale, weight 37kg, febrile, blood pressure of 100/70mmHg and heart rate of 78/min. There was no cervical lymph node palpable. Abdomen was soft, tenderness in right hypochondriac, right lumbar and RIF. Vague mass 10x6 cm palpable in right lumbar, right hypochondriac and right paraumbilical region. No organomegaly. Digital rectal examination revealed empty rectum and no mass palpable. Other systemic examinations including cardiovascular and lungs were normal. Biochemically, her haemoglobin was 7g/dl, total white cells 13,000, Liver enzymes were normal.

An Initiative of The Tamil Nadu Dr. M.G.R. Medical University University Journal of Surgery and Surgical Specialities Colonoscopy was performed showing stricture at 80cm from anal verge and unable to negotiate the scope further. Biopsies were taken from stricture and histopathological report was chronic non specific inflammation. Chest X-ray was normal. Mantoux test resulted in induration of 10mm. Computed tomography (CT) of abdomen and pelvis showed long segment wall thickening noted in caecum, ascending colon, hepatic flexure of colon & trasnverse colon with multiple adjoning lymphadenopathy. Imp: Carcinoma colon with nodal metastasis, rare possiblity of inflammatory colitis. With this evidence we planned for diagnostic laparoscopy, intraoperatively we found mass involving ascending colon, hepatic flexure and proximal 1/3rd transverse colon with omentum adherent to gall bladder, so we converted into open procedure and did extended right hemicolectomy with end to side ileo-colic anastomosis and cholecystectomy.



### Fig.1 Gross picture

Histopathologically revealed well differentiated adenocarcinoma invades through muscularis propria with tuberculous colitis and caseating tuberculous lymphadenitis. Both resected margins free of tumor. No lymphovascular or perineural invasion. There were 23 nodes identified, all of them are negative for metastases. postoperative period was uneventful. The patient was on CAT-I ATT.



# Fig.2 Histology picture DISCUSSION

Arguably, the first published description of coexisting tuberculosis and carcinoma was that of Boyle who described "cavitation cancereuse" as one of the six types of tuberculosis. The association of tuberculosis and cancer has since been recorded in most organs by various authors. Carcinoma in different parts of the colon with intestinal tuberculosis have been reported by Paustian. Kaplan et al. found TB complicating neoplastic disease in only 4 out of 6472 patients with carcinoma of the colon, a prevalence of 6/10,000. Indian researchers have found a higher frequency of coexistent disease. Some Indian authors have proposed that the association of carcinoma and tuberculosis is coincidental; the argument being that compared to the high incidence of abdominal tuberculosis in India, the cases of coexisting tuberculosis and carcinoma are very few. This may be true in some cases particularly when the neoplasm originates at a site distant from the tubercular focus. However, to put the simultaneous occurrence of the two conditions at the same site down to mere coincidence is far too simplistic. Some diseases like ulcerative colitis, Crohns disease, and schistosomiasis predispose to malignancy. Chronic inflammatory mucosal damage initiating a sequence of metaplasia and dysplasia results in neoplastic change. Evidence also suggests that pulmonary scarring of tuberculous etiology play a role in the generation of some lung cancers, usually adenocarcinomas originating in the peripheral portion of the lung. Drawing parallels it may be postulated that the ulcerative lesions of intestinal tuberculosis are precursors of carcinomas and this possibility was suggested by Japanese researchers. These carcinomas arose as a result of repeated insults by way of erosions, ulceration, and consequent regeneration. On the other hand, it is also universally accepted that factors that disturb host immunity increase susceptibility to active tubercular infection, either exogenously or endogenously. Severe weight loss or malnutrition related to an advanced neoplastic disease is such a factor. Conceivably invasion of a dormant tubercular lesion by carcinoma could lead to activation and endogenous reinfection. Locally produced tumor peptides or antigens may also upset the milieu of a granuloma and allow the TB organisms to proliferate. We are inclined to believe that this is true in our case given the age of the patient and the lack of a previous history of active tuberculosis.

## CONCLUSION

Pertaining to the abdominal tuberculosis and colonic carcinoma, there is still no definitive cause-effect relation could be ascertained and lots of study is needed to detect or explain the association between these two pathologies. Patients born in high incidence parts of the world have a higher risk of latent and therefore active tuberculosis, more so the latter if they become immunocompromised. We should be aware of this when treating cancer patients.

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