Inflammatory pseudotumor of ascending colon presenting as PUO: A case report

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ABSTRACT
Inflammatory pseudotumour (inflammatory myofibroblastoma, plasma cell granuloma) is a rare benign lesion in adults and children. It frequently simulates a true neoplasm both clinically and morphologically, presenting a diagnostic and therapeutic dilemma. We herein report a case of a 16 year old girl who presented with pyrexia of unknown origin for almost 4 months before developing a palpable lump in the right iliac fossa. The patient underwent a right hemicolecction for a presumed ascending colonic neoplasm, and histology revealed that it was an inflammatory pseudotumour. Following resection of the mass there was resolution of constitutional symptoms and normalization of laboratory abnormalities. Since these tumors are self-limiting and have a favorable prognosis, our case review and review of literature suggests the importance of preoperative and intraoperative recognition of this entity, especially if laboratory parameters suggest an inflammatory process.

KEY WORDS
Inflammatory pseudotumor, inflammatory myofibroblastic tumor, plasma cell granuloma

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INTRODUCTION
Inflammatory pseudotumour (inflammatory myofibroblastoma, plasma cell granuloma) is a rare benign lesion in adults and children. It frequently simulates a true neoplasm both clinically and morphologically, presenting a diagnostic and therapeutic dilemma. We report a case of a sixteen year old girl who presented with pyrexia of unknown origin for four months before developing a lump in the right iliac fossa, which was a pseudotumour of the ascending colon.

CASE REPORT
A sixteen year old female presented with pyrexia for three months, with no other associated symptoms. The fever was intermittent to begin with and would last for two to three days at a time for the initial two months. She then began to have fever typically from 2 pm to 10 pm daily for the last one month. She consulted a general practitioner a week after the onset of fever and investigations had revealed a white cell count of 10,700/cu mm and an ESR of 66mm at the end of one hour. Liver functions, renal functions and a Widal test were normal. An x-ray chest was normal. She had then been given multiple courses of antibiotics and antimalarials with no respite.

When she presented to our institute, she was 39 kg, febrile, other vital parameters being normal. She had no other symptoms, no organomegaly or lymphadenopathy, and clinical examination was unremarkable. Her hemoglobin was 12g%, white cell count was 6,200/cu mm, ESR was 90mm/hr, blood culture, biochemistry, and x-ray chest were normal. A CT scan of the chest was normal. In the absence of any diagnostic features of tuberculosis or any other chronic illness, it was decided to treat her as an incompletely treated case of Salmonella infection and hence she was...
started on a course of third generation cephalosporin for 10 days. Despite this the fever persisted. Her white cell count rose to 10,500/cu mm and ESR to 109 mm/hr. In view of failure to respond to the above and a rising ESR, she was empirically started on 4 drug anti-tuberculous therapy.

Three weeks thereafter, the fever persisted as before, but she developed a firm to hard mass in the right iliac fossa. A CT scan of the abdomen (Figure 1) showed a large heterogeneously enhancing mass lesion in the right iliac fossa measuring 8.8 cm x 4.3 cm x 7.8 cm, involving the ascending colon. There was also a non-enhancing cystic or necrotic area seen within the lesion. Small lymph nodes were seen in the mesentery measuring 1-2 cm in size. CT guided FNAC was inconclusive, and an exploratory laparatomy was undertaken, with a provisional diagnosis of an ileocaecal neoplasm or infective lesion, probably tuberculosis. On laparatomy, a large tumor measuring 15 cm x 10 cm was seen in the proximal part of the ascending colon (Figure 2). A frozen section of the tumor suggested a benign tumor of stromal origin. A quartercolectomy was done with ileocolic anastomosis. The post-operative recovery was uneventful with resolution of constitutional symptoms and the patient was afebrile from the first postoperative day. She was discharged on the seventh post-operative day.

DISCUSSION

Inflammatory pseudotumour, inflammatory myofibroblastic tumor and plasma cell granulomas are synonyms used to describe the entity of an inflammatory solid tumor containing spindle cells, myofibroblasts, plasma cells and histiocytes. These are postulated to be an aberrant response to tissue injury with myofibroblasts as the primary cell type, with exaggerated inflammatory reparative reaction to trauma or infection. There are reports of associations of pseudotumors of the alimentary tract with Castleman’s disease, Hodgkin’s disease, peptic ulceration, Behcet’s disease, chronic infections (Campylobacter jejuni, H.pylori), post-traumatically and post-surgically. Anaplastic lymphoma kinase (ALK), a hallmark of anaplastic large cell lymphoma, has recently been implicated in the genesis of some inflammatory pseudotumors in children and young adults. Some cases may be related to an infectious process or may represent the sequel of an infection. This infective element could account for the pyrexia which our patient presented with. Recently a proportion of inflammatory pseudotumors occurring in the liver and spleen have been shown to represent a peculiar form of Ebstein-Barr virus-associated follicular dendritic cell tumor. Some other cases are myofibroblastic or fibroblastic neoplasms, as evidenced by demonstration of clonal cytogenetic abnormalities and the occasional occurrence of metastasis.

It commonly affects children and young adults, but can affect all age groups. It virtually affects every anatomic region and organ, the common sites being lung, brain, eye, pericardium, heart, trachea, lymph nodes, bladder, pelvis and the gastrointestinal tract. Cases involving the alimentary tract are rare and their etiology obscure. Symptomology varies, depending on the site of involvement. Microscopically, this solid tumor consists of inflammatory plasma cells, histiocytes, and lymphocytes in a matrix of spindle-shaped myofibroblasts. These lesions can be locally invasive,
Mucinous carcinoma of rectum in an 11 year old child

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ABSTRACT
The rarity of rectal carcinoma in children has prompted us to report this patient who presented with bleeding per rectum and constipation. Histopathological examination of biopsy revealed the growth to be a mucinous carcinoma of rectum and which was inoperable on exploratory laparotomy.

KEY WORDS
Gastrointestinal haemorrhage, intestinal obstruction, colorectal malignancies.

INTRODUCTION
Carcinoma of the colon and rectum is a relatively uncommon malignancy in India as compared to the western world. The age-standardized rates of colorectal cancer in India have been estimated to be 4.2 and 3.2/1,00,000 for males and females, respectively as compared to 60.8 and 42.3 respectively in the USA. Considering such a low incidence in adults it would be rare to find colorectal carcinoma in the pediatric age group. A literature search could not reveal much more information on colorectal cancer in the Indian pediatric population. Primary gastrointestinal malignancies constitute only 1% of pediatric neoplasms and therefore, remain unsuspected in children, often presenting late with symptoms of intestinal...