



CARCINOMA OF CAECUM : A RARE CAUSE OF PYREXIA OF UNKNOWN ORIGIN

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ABSTRACT Pyrexia of unknown origin (PUO) was originally defined as a body temperature greater than 38.3 C on several occasions longer than 3 weeks, with a diagnosis that remains unclear after 7 days of obligatory investigations. Usually PUO is associated with reticuloendothelial malignancies but only a few types of solid organ malignancies like hepatocellular carcinoma and nephroma were known to have been associated with PUO.

KEYWORDS : PUO, Adenocarcinoma of caecum, Hemicolectomy

INTRODUCTION:

In this case our patient had history of recurrent fever and having gastrointestinal symptoms such as occasional Increased frequency of stools and Bleeding Per Rectum 2 months ago few episodes. PET-CT demonstrated a large mass with activity in caecum and fever resolved after 8 days of right hemicolectomy. This case indicates that physicians should consider caecal and colorectal malignancies in the differential diagnosis of PUO.

PUO is a critical problem as the diseases causing PUO are numerous and are often complicated. One Caucasian population based study showed that PUO in cancer patients is not only associated with haematological malignancies but also with solid organ tumors like colorectal adenocarcinoma. Caecal carcinomas are rare but insidious in onset and cannot be easily diagnosed with colonoscopy and barium enema. Hence high index of suspicion is needed to diagnose caecal carcinoma as it is a curable disease if it is diagnosed earlier.

CASE REPORT:

A 73 year old male presented with recurrent low grade intermittent fever since 18 months for which he was taking anti-pyretics sos. He had no symptoms other than fever for 18 months apart from diffuse colicky type of abdominal pain and Increased frequency of stools on and off .He had no complaints of vomiting, loose stool and constipation. He started to have complaints of bleeding per rectum on and off since 2 months. He refused any history of loss of weight and loss of appetite. No family history of bowel carcinomas. He has no history of smoking or consuming alcohol. He is a known case of hypertension since 30 years on telma 40MG BD, known diabetic since 3 years on metformin 500MG BD, asthmatic on regular inhalers and known CAD on treatment with rosuvastatin, nitroglycerin and metoprolol. On examination, he was afebrile and hemodynamically stable. He was not pale and not icteric on admission. Abdominal examination was normal without any enlarged liver, spleen and kidney and no tenderness and no mass was palpable, Per rectal examination was normal. He was evaluated in multiple hospitals since 1 year extensively with multiple CBCs, blood cultures and other investigations but none was diagnostic. Bone marrow was done to rule out haematological malignancies and it was normal. Barium enema was normal study.

Colonoscopy showed polyps in sigmoid colon and a mass in ileo-caecal region. HPE of colonoscopic specimen revealed hyperplastic polyps and ileocaecal mass showed moderate chronic ileitis and colitis with activity. Gene XPERT and AFB were negative. PET-CT was done and it showed large well defined heterogeneously enhancing soft tissue mass in caecum. In view of fever since 18 months without any diagnosis even with extensive workup, he was taken up for right hemicolectomy and sample sent for HPE revealed adenocarcinoma of caecum. Post surgery, his fever settled down and he was afebrile from 8th post operative day.

Fig 1a & b : Microphotograph showing colonic mass and chronic inflammation



Gross Photograph showing the caecal mass

DISCUSSION:

PUO is challenging for both patients and treating physicians because diagnosis often involves multiple modalities involving invasive procedures that often do not clearly explain the cause of fever. Vanderscheueren, et al. clearly proposed to consider cancers as possible etiology for PUO as they occupy 15% of the cases with PUO and are the major cause of PUO related deaths. Though major malignancies associated with PUO involves reticuloendothelial system, solid organ malignancies like HCC, hypernephroma, atrial myxoma and more recently colorectal carcinomas have been reported to cause PUO.

The Cause of the PUO related to caecal and colorectal cancers may be

explained by a non-infectious background. Tumors cause recurrent fever by intermittent necrosis with subsequent phagocytosis and cytokine release Interleukin (IL-1) and tumor necrosis factor (TNF) were the major endogenous pyrogens identified in tumors causing PUO. These IL-1 and TNF centrally act on the thermoregulatory center of the hypothalamus.

Etiology of caecal carcinoma is similar to the remaining colon and it includes low fiber diet, animal fat, dietary red meat, heredity causes, lynch syndrome, polyposis syndrome, chronic inflammatory disease like ulcerative colitis and chrons disease. It may be because of the westernization of our diet, we are now witnessing a higher incidence of bowel carcinomas

Clinical presentation of the caecal carcinoma usually varies from patient to patient and it is insidious in onset. Usual presentation includes weight loss, right iliac fossa mass and iron deficiency anaemia or may present atypically with caecovesical fistula, acute distal bowel obstruction or as perforation with peritonitis.

The standard diagnostic evaluation for colorectal cancers is a combination of colonoscopy and double contrast enema. But these investigations have limitation in diagnosis of caecal cancers. Technically it is difficult to visualize the caecum through colonoscopy and it requires technical expertise. The role of mutant genes such as APC, DCC, K-ras and P53 in our geography needs further evaluation and research.

In conclusion, it is recommended to rule out colorectal carcinomas including caecal tumors in any patient above the age of 40 years with altered bowel habits, iron deficiency anaemia and PUO. Caecal malignancies are insidious in onset and are treatable and hence high index of suspicion is required for early diagnosis.

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