



ORIGINAL RESEARCH PAPER

General Surgery

A CASE REPORT OF CARCINOMA CECUM PRESENTING AS SMALL BOWEL OBSTRUCTION

KEY WORDS: carcinoma of caecum, acute intestinal obstruction.

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ABSTRACT

Background: Colorectal tumors are common in the developed countries and rare in developing countries. With the event of westernization of the diet, the incidence is increasing in the developing countries. Among all carcinoma's, caecal tumor presents late due to its anatomical features. The carcinoma cecum are insidious in onset and often attend large size. Barium enema and colonoscopy have limitation in reaching this region. Contrast enhanced computed tomography (CECT) scan is done for confirming the diagnosis but often not done because it is not cost effective in the developing world. Carcinoma caecum is easily treatable disease if diagnosed early.

CASE PRESENTATION

A 55 year old female came to our OPD with h/o abdominal pain for 4 days, associated with h/o several episode of vomiting for 2 days, X ray abdomen showed stepladder pattern multiple air fluid level, CT was suggestive of small bowel obstruction with ileocaecal thickening causing significant lumen obstruction. Emergency laparotomy was performed. Intra operative finding: small bowel dilated due to caecal mass without any peritoneal and solid organs deposits, since patient condition was not stable we proceeded with distal ileum loop ostomy, post operative period was uneventful, further investigation was done. In which colonoscopy shows ulceroproliferative growth involving caecum.

Biopsy was taken from growth, which came as high-grade dysplasia. Hence we planned for elective open laparotomy, intraoperatively hard mass was palpable in caecum without any peritoneal metastasis, solid organ involvement and ascites, so we proceeded with resection of mass with end to side ileotransverse anastomosis. Post operative period was uneventful.

Histopathology reported as moderately differentiated adenocarcinoma with all margins free of tumor and no nodal involvement, now the patient on adjuvant chemotherapy

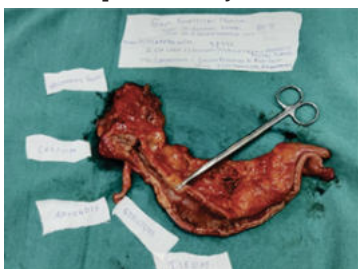


fig1: Intraop picture of the resected specimen

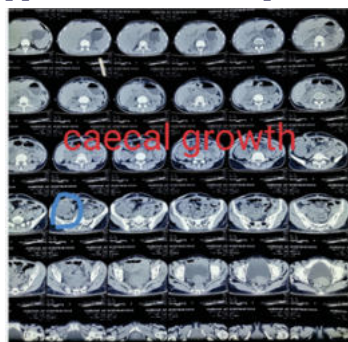


fig2: CT image of the tumor.

DISCUSSION

The peak incidence for colorectal carcinoma is 60-79 years, fewer than 25% of cases occur before the age of 50 years. Colorectal cancer has higher incidence in females. Colorectal carcinoma has a worldwide distribution with the highest death rate in the United States and Eastern European Countries but up to tenfold lower rate in Mexico, South Asia and Africa.

Environmental factors particularly dietary practices are implicated in the striking geographic contrast.^{6,7}

In addition, dietary studies implicated obesity and physical inactivity as risk factors for colon cancer. It is theorized that reduced fiber contents leads to decreased stool bulk increased fecal transit time in the bowel and altered bacteria flora of the intestine. These will lead to toxic metabolites held in contact with the colon for a longer period thereby inducing carcinogenesis.

It may be probable that it is due to westernization of our diet, that we are now witnessing a higher incidence of bowel cancer. Our diet has change from the traditional high fiber diet rich in carbohydrates to low residue diet rich in protein and fats resulting in decrease transit time, bacterial fermentation and toxic metabolites leading to colon cancers.

Caecal carcinoma most often present either acutely with distal small bowel obstruction as the second patient or at outpatient with insidious anemia or intermittent obstruction characterized by abdominal pains or altered bowel habit.

They may be relatively asymptomatic and present with mass in the right iliac fossa. They may perforate and lead to peritonitis. Occasionally they can intussuscept. They may cause acute appendicitis or they may invade the surrounding structures. A case of caecovesical fistula has been reported.

Caecal tumor may account for up to 35% of colonic tumors. The etiology of the cancer is similar to those of the rest of the colon. The etiology of colorectal cancer include, adenoma carcinoma sequence, environmental factors (dietary red meat, animal fat and lower fiber diet), heredity cases, polyposis syndrome, lynch syndrome, chronic inflammatory disease like ulcerative colitis and Crohn's disease. These risk factors that are well established in the developed countries may be similar to risk factors in the developing countries. This may probably be the initiating factor in the etiology of his caecal tumor suggesting adenoma carcinoma sequence. Although chronic inflammatory diseases are rare in our environment. There has been an emerging trend in westernization of our diet. Most people now abandon the traditional diet rich in fiber and cellulose in favor of low residue and refined diet rich in protein and animal fat.

The role of mutant genes such as APC, DCC, K-ras and p53 in our environment needs evaluation. Clinical presentation of caecal tumor varies as seen in the different presentation in our patients. The usual presentations include: i) iron deficiency anemia due to occult blood loss; ii) weight loss; iii) right iliac fossa mass, as seen in all the 3 patients. However there are several reported cases of atypical presentation such as caecovesical fistula,¹⁰ mimicking acute appendicitis¹⁰ and perforation with generalized peritonitis as seen in the third case report. Distal small bowel obstruction as in the second case and haematochezia when it occurs secondary to chronic inflammatory bowel disease has also been reported.¹¹

The standard evaluation for colorectal carcinoma is a combination of colonoscopy sigmoidoscopy and double contrast enema. However these investigative tools have limitation in evaluating caecal tumors. Colonoscopy may have limitation because of technical difficulties to visualize the caecum especially in our environment where the technical expertise is lacking. Barium enema may not be diagnostic and often films are of poor quality. CT scan has high sensitivity and specificity. Therefore a high index of suspicion is advocated if we are to diagnosed and treat this tumor that has a high rate of cure. It is recommended that any patient above the age of 40 years in our environment with altered bowel habit should be properly evaluated to rule out colorectal cancer. Also it is a clinical maxim that iron deficiency anemia in an older man means gastrointestinal cancer until proven otherwise. In conclusion, caecal tumors are treatable, early diagnosis depends on high index of suspicion in our environment.

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