

Colonic cancer in young adults - a report of two cases

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Abstract: Colonic carcinoma in young adults are rare and has a higher mortality and morbidity because of poor histological type and delay in diagnosis. We are reporting two cases of mucinous adenocarcinoma of caecum and sigmoid colon in young males.

KeyWords: colon, cancer, young adults

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Introduction

Colorectal cancer is the second most common visceral malignancy exceeded only by lung cancer in the United States¹. The reported incidence of the colorectal carcinoma in first two decades is less than 1%¹. The diagnosis is often delayed due to vague gastrointestinal symptoms, which are usually associated with inflammatory bowel diseases in children. The common histological type is poorly differentiated mucin secreting adenocarcinoma, which is also associated with poor prognosis.

Case Reports

Case 1 : A 17-year-old male presented with fever, intermittent right lower abdominal pain, diarrhea, anaemia and weight loss. Patient had similar complaints 3 months before, which subsided with antibiotics. Per abdominal examination revealed a firm and tender intrabdominal mass in right iliac region, measuring 2 x 3 cms. A clinical and radiological diagnosis of ileocaecal tuberculosis/appendicular mass was made. Peroperatively an irregular ileocaecal mass with multiple nodules in omentum were seen. Therefore a segmental resection of terminal ileum, caecum and proximal segment of ascending colon was done with end to end anastomosis (Fig. 1). Histopathological examination of the above specimen revealed features of mucin secreting adenocarcinoma, signet ring cell type (Fig. 2A) with metastatic deposit in lymphnode and omentum (Fig. 2B) - Astler collar C2 stage (modified Duke

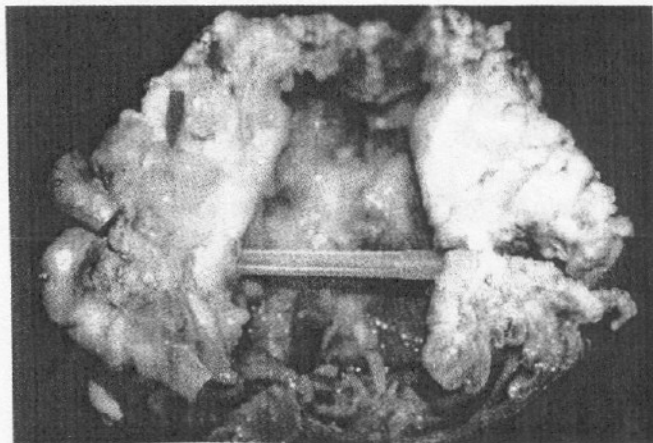


Fig. 1. Gross photograph of caecum with appendix showing ulceroproliferative growth with mucoid areas.

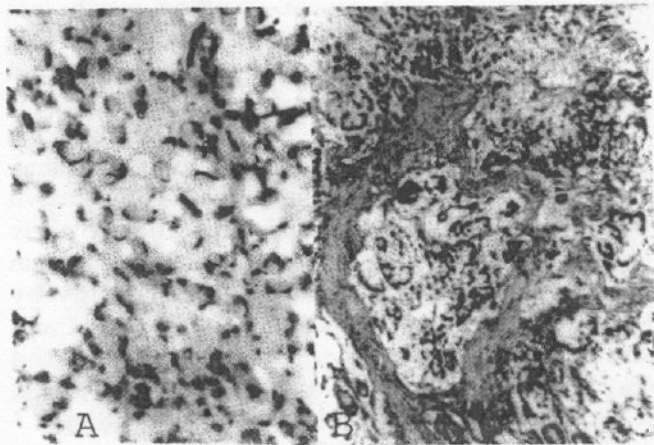


Fig. 2. A. Photomicrograph showing signet ring cells. (H & E, x400). B. Photomicrograph of omentum showing tumour deposits (H&E, x100).

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staging). Patient was put on calcium leucovorin and 5 fluorouracil for 4 days for 6 cycles at an interval of one month.

Case 2 : A 19 year old male had undergone surgery and chemotherapy 6 months prior elsewhere for mucinous

adenocarcinoma of sigmoid colon, was subsequently admitted to our hospital for pain abdomen. Per abdomen examination revealed distention of abdomen and hard nodular mass in left iliac fossa. Ultrasound showed ill defined nonhomogenous mass in left iliac fossa with matted bowel. So an ultrasound diagnosis of pseudomyxoma peritonei was made. FNAC of same mass showed plenty of degenerated mesothelial cells and occasional tumor cells in a proteinaceous background.

Discussion

Colorectal carcinoma is the second most common visceral malignancy following lung cancer in United States¹. Peak incidence occur in sixth decade. The incidence below 40 years is 4 to 8 percent and in first two decade is less than 1 percent of all cancers, accounting for a frequency of only 1.5 per million children¹. Only 400 cases in paediatric age group have been reported¹. No age is too young for the development of adenocarcinoma colon since a case has been reported in a 9-month-old infant². Male to female ratio has been reported to be 2:13. The predisposing conditions which increase the risk of developing colorectal carcinoma include familial polyposis, Gardner's syndrome, Turcot's syndrome, Peutz Jegher's syndrome, juvenile polyposis of colon, ulcerative colitis and familial cancer syndromes or family history of genitourinary tract or bowel cancer. However majority of paediatric and adolescent colorectal carcinoma arise de novo^{3,4}. Since the most common presenting signs and symptoms are vague abdominal pain, nausea, vomiting, weight loss and change in bowel habit, a diagnosis of chronic inflammatory bowel disorders is usually considered and a diagnosis of colonic cancer is usually missed or delayed. More than 50% histological type of childhood colonic cancer are poorly differentiated, mucin secreting, signet ring variety of adenocarcinoma which are known to be more aggressive with predisposition to early metastasis. This histological type of carcinoma is seen only in 5-15% of adult patients³. In a study by Minardi.A.J. et al⁵, 37% of the lesions were Dukes C and 22% were Dukes D with poor 5 year survival (11 % and 0% respectively). Overall 5-year survival rate reported is 3% which is significantly less than that of adults¹.

In the first case, no predisposing factor was

identified. Patient presented with features of chronic inflammatory bowel disease, was supported by radiological evidence and treated for the same for a few months. Hence the final diagnosis was delayed. Following histopathological diagnosis of the resected specimen, patient was put on chemotherapy for which patient responded well with weight gain and without any clinical signs and symptoms from which he was suffering. In the second case patient presented with recurrence following treatment 6 months prior elsewhere and died a week later signifying the poor prognosis of these cases.

Hence colon cancer should not be excluded in children only on the basis of age. Barium enema and colonoscopy should therefore be applied to young patients with unexplainable abdominal pain, change in bowel habit and weight loss especially those over 10 years of age⁶. Increased awareness and consideration of colon cancer in children will result in early diagnosis, a more favorable disease stage and prolonged survival because median survival of cases with delayed diagnosis reported was 4 months compared to 24 months in patients diagnosed at a earlier stage¹.

A high index of suspicion and early diagnosis with radiological study, colonic endoscopy and endoscopic biopsy results in successful treatment and better prognosis.

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