CASE REPORT

A CASE REPORT ON CARCINOMA OF JEJUNUM

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ABSTRACT

A 69 years old male presented with features of acute intestinal obstruction. At exploratory laparotomy, a mass was felt in jejunum. The growth with adequate margin and mesenteric lymph nodes were removed. The jejunal growth was diagnosed as adenocarcinoma on histopathology, which is a rare tumour of small intestine. He was planned adjuvant chemotherapy. He is in complete remission 6 months after follow-up.

Key words: Jejunum, Adenocarcinoma, Radiotherapy, 5-Flourouracil

INTRODUCTION

Carcinoma of jejunum is one of the rare types of carcinoma. Small intestinal adenocarcinoma accounts for 0.3% of all malignancies of the gastrointestinal tract and 30% to 50% of all malignancies of the small intestine.1 Main drawback of Jejunal cancer is that it is characterised by hidden and non-specific symptoms. Despite a thorough history, physical examination, and complete diagnostic work-up, the correct diagnosis of small intestinal malignancy is established pre-operatively in only 50% of cases and exploratory laparotomy is often required2 Patients usually present with intestinal obstruction. The tumours are usually not accessible to examination with the endoscope. The difficulty of early diagnosis of carcinoma jejunum is reflected in difficulty in curability.3 And ultimately leads to more suffering of the patients. This is why carcinoma of Jejunum requires more attention and need to explore by additional researches.

CASE REPORT

A 69 years old male presented as a surgical emergency with symptoms of sudden severe abdominal pain, absolute constipation, distension and repeated vomiting. He had no previous history of constipation, pain abdomen or passage of mucus, bleeding per rectum before this acute incidence.

Examination – On examination, he was mildly dehydrated with tachycardia (pulse 110/ minute), but blood pressure was normal. His abdomen was distended and tender. Liver and spleen were not palpable. Other systemic examinations were normal.

Investigation - Multiple fluid and gas filled bowel loops were seen in straight x-ray abdomen in erect posture.

Surgery - As patient presented with acute intestinal obstruction, emergency laparotomy was done after parenteral hydration. During operation, lower midline incision was given. An annular constricting Growth involving the jejunum almost completely occluding lumen was seen 30 cm distally from duodeno-jejunal flexure. The jejunum proximal to the stricture was hypertrophied. No secondary deposit was seen in the liver or in peritoneum. A resection and end to end anastomosis with removal of mesenteric glands was performed. Postoperative period was uneventful. He was discharged and referred to the department of radiotherapy.

Histopathology - The resected segment showed moderately differentiated mucin secreting infiltrative adenocarcinoma jejunum (Fig 1, H&E x 100), with metastasis in 4 out of 11 mesenteric lymph nodes. Carcinoma had penetrated the muscle coat of the small intestine and had extended into the serosa. Lymphovascular tumour emboli and perineural invasion were seen (stage-Dukes'C). Surgical line of resection was free of lesion.

Postoperative routine haematological and biochemical parameters were normal. His chest x-ray and ultrasonogram of abdomen were normal and did not show any evidence of metastases. Serum carcinoembryonic antigen (CEA) level was 7ng/ml.

Chemotherapy and follow-up — His disease stage was T3N1M0. He was planned adjuvant chemotherapy with single agent capecitabine for six cycles. He is in

complete remission at 6 months follow-up.

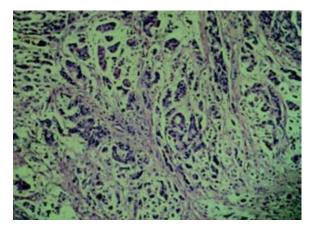


Fig 1: Tumour Cells Arranged in Glandular Pattern and in Solid Sheets and the Background Reveals Abundant Mucin Deposition

DISCUSSION

Malignant lesions in small intestine are mainly lymphomas. Carcinoma in jejunum is quite rare.1 Clinical presentations mainly consist of anaemia, dyspepsia, anorexia, intestinal obstruction, ileus, gastrointestinal haemorrhage. Macroscopic classification of carcinoma jejunum is not yet clear. Annular stenotic type lesions are most frequent. Since clinical presentations of small intestinal adenocarcinoma are vague and non-specific, they are usually diagnosed in advanced stages. The rarity of this tumour and the difficulties with endoscopic examinations in small intestine may also attribute to the delayed diagnosis. As a result, survival is generally poor, with most series reporting five-year survival rates of 20-30%.1 However, double balloon enteroscopy (DBE) is a safe and effective method to make pre-operative histological diagnosis of jejunal cancer in suspected cases2. The pathogenesis is not clear. Reasons for rarity of

carcinoma in jejunum may be due to (a) there is no anatomically fixed flexion site, (b) fluid intestinal contents pass in a short period restricting carcinogen exposure, (c) contents are alkaline minimising bacterial flora, (d) high IgA level, etc.4 Majority of the tumours were infiltrate in the serous membrane or deeper. Radical surgery with lymph node dissection is the cornerstone of treatment. Adjuvant chemotherapy with different combination of 5-fluorouracil(5-FU), leucovorin, adriamycin, paclitaxel, oxaliplatin, etc, have been tried in several studies particularly in advanced diseases.^{5,6} Capecitabine is a prodrug of 5-fluorouracil with relatively safe toxicity profile and widely used in colorectal malignancy. Intratumoural concentration of active molecule 5-FU is much higher with capecitabine. Moreover, due to oral administration compliance is much better with this drug. So, the above elderly patient with poor general condition and performance status was treated with capecitabine and he tolerated it well.

REFERENCES

- Ugurlu MM, Asoglu O, Potter DD, Barnes SA, Harmsen WS, Donohue JH. Adenocarcinomas of the jejunum and ileum: a 25-year experience. J Gastrointest Surg 2005; 9: 1182-8.
- Lee HJ, Cha JM, Lee JI, Joo KR, Jung SW, Shin HP. A case of jejunal adenocarcinoma diagnosed by preoperative double balloon enteroscopy. Gut Liver 2009; 3: 311-4.
- Good CA. Tumors of small intestine. AJR Am J Roentgenol 1963; 89: 685.
- Lowenfels AB. Why are small bowel tumours so rare? Lancet 1973; i: 24-6.
- Cornelison TL, Goldberg JM, Piver MS. Taxol and platinum chemotherapy in the treatment of pancreatic and jejunal carcinoma. J Surg Oncol 1995; 59: 204-8.
- Chen CW, Wang WM, Su YC, Wu JY, Hsieh JS, Wang JY. Oxaliplatin/5-fluorouracil/leucovorin (FOLFOX4) regimen as an adjuvant chemotherapy in the treatment of advanced jejunal adenocarcinoma: a report of 2 cases. Med Princ Pract 2008; 17: 496-9.