

Case Report

Primary Adenocarcinoma of Jejunum - A Rare Case Presentation

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Abstract: Small bowel malignant tumors account for less than 2 % of all gastrointestinal tumors. Among small bowel duodenum constitute majority of cases. Primary jejunal carcinoma is rare and is difficult to diagnose clinically due to non-specific symptoms. We present here a rare case of primary jejunal carcinoma in a 72 yr old male patient, who presented with complaints of abdominal distention and vomiting. Clinical diagnosis of tuberculosis or carcinoma is given. Laprotomy was done and segment of intestine removed. Histopathological examination confirmed the diagnosis of well-differentiated adenocarcinoma.

Keywords: Adenocarcinoma, Histopathological, Jejunum, Laprotomy, Tuberculosis.

INTRODUCTION

Primary adenocarcinomas of the small intestine are rare and account for 2% of all gastrointestinal tract tumors [1,2]. Although the small bowel accounts for about three quarters of the length of gastrointestinal tract, the rarity of adenocarcinoma arising in the small bowel is largely unexplained but is most likely due to a combination of several factors [3]. The rarity of these lesions, non-specific symptoms and signs, combined with the inaccessibility of the small bowel by endoscopic instruments, often lead to late diagnosis of these neoplasms [3]. Due to difficulty in diagnosis, treatment is delayed hence, these tumors have poor prognosis. Here we presented one of such rare case.

CASE REPORT

A 72 year old male patient presented to the outpatient department with complaints of abdominal distention and vomitings since 3 month. Clinical diagnosis of subacute intestinal obstruction with probable cause of tuberculosis or carcinoma was kept. Routine laboratory investigations such as complete blood picture, biochemical, renal and liver function tests were normal. X ray abdomen was within normal range. Ultrasound abdomen showed mild constriction in the jejunal segment with dilatation of the proximal segment. Laprotomy was done and constricted part of the segment was excised and sent to the pathology department for confirmation. Postoperative condition of the patient was stable.

HISTOPATHOLOGY

Grossly we received a segment of intestine (Jejunum) measuring 10 cm in length with constriction noted at 4 cm from one end with thickened wall (Figure 1). Cutsection of the thickening showed grey white area. Also noted multiple small lymphnodes with largest measuring 1 cm in diameter. Multiple bits were taken from the proximal resected margin, distal resected margin, thickened area and lymphnodes. Tissue was processed, stained with hematoxylin and eosin and examined microscopically.

Microscopic sections revealed features of well differentiated mucinous adenocarcinoma of jejunum, extending up to serosa (Figure 2,3,4). All the lymph nodes showed reactive hyperplasia with no metastasis (T3 N0 M0, Stage IIA).



Figure 1: Gross showing constriction with solid grey white area.

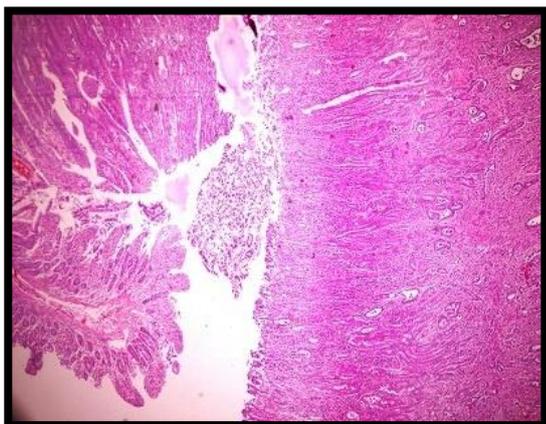


Figure 2: H&E 4x showing wall of jejunum with tumor tissue.

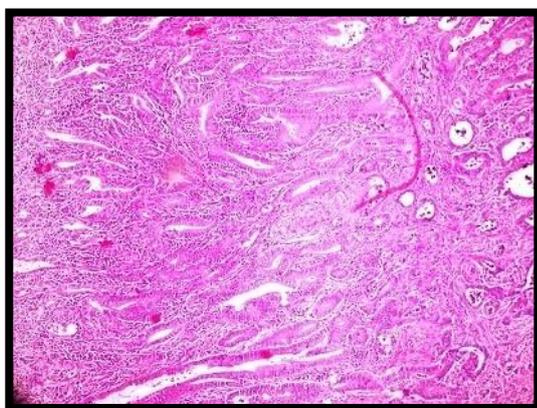


Figure 3: H&E 10x tumors tissue arranged in glands with few filled with mucin.

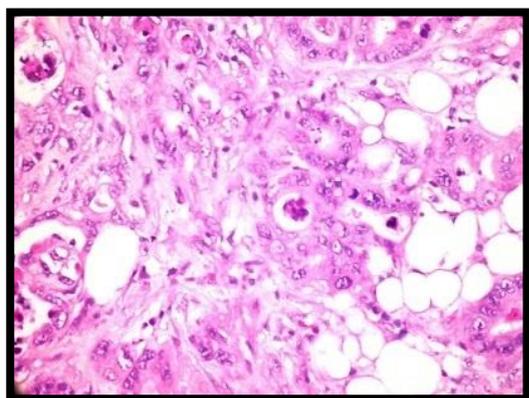


Figure 4: H&E 40x tumor invading into serosa and mesentery.

DISCUSSION

Primary adenocarcinoma of the small intestine is 40- 60 times less frequent than that of the colon. Primary adenocarcinoma of jejunum is extremely rare and frequently develops in elderly patients with slight male predominance [4]. Jejunal cancers develop in the region 50 to 60 cm distal to ligament of Treitz in more than 80% cases. In our case, the patient was an elderly

male and lesion was located distal to ligament of treitz. Jejunal adenocarcinomas present with vague and nonspecific symptoms. The most common symptom is gastrointestinal (GI) bleeding, more often obscure. Apart from this, patients may present with nonspecific complaints such as abdominal pain, anaemia, nausea and vomiting, weight loss, malabsorption, diarrhoea, intestinal obstruction, and perforation [5]. Our case presented with non-specific symptoms of abdominal distension and vomiting.

Certain hereditary syndromes such as Peutz-Jeghers syndrome, Familial Adenomatous Polyposis, Gardner syndrome, Von Recklinghausen disease and Hereditary Nonplopoyosis Colorectal Carcinoma are associated with an increased incidence of particular histologic types of small intestinal tumours [2, 5]. Diagnosis made from abdominal ultrasound, CT scan, contrast enhanced radiography of small bowel. It is relatively rare to make a definitive diagnosis before surgery, as jejunum is not amenable to upper GI endoscopic. However, recent advances in endoscopic technologies, such as capsule endoscopy and double balloon enteroscopy shown to diagnose these tumors preoperatively [4,5,6]. Our case showed constriction of the jejunum with wall thickening on ultrasonography with dilatation of the proximal segment, based on this probable diagnosis of tuberculosis or carcinoma is given.

Primary treatment of jejunal carcinoma include resection of the involved segment with lymph node dissection[7]. Currently there is no role for any adjuvant or therapeutic chemotherapy, since small bowel adenocarcinoma are resistant to chemotherapy as other gastrointestinal adenocarcinoma [8]. Intra-abdominal recurrence is the usual cause of death. In present case as the primary diagnosis was tuberculosis, limited resection was done along with the lymphnodal dissection. But, on histopathologic examination diagnosis of adenocarcinoma was given with stage IIA. As the tumor was limited to the jejunum (Stage IIA), the patient was offered no further treatment and was kept on close follow up. The prognosis of small intestinal cancer is poor, possibly because cancer is advanced at the time of detection in many patients due to a delayed diagnosis.

CONCLUSION

Primary adenocarcinoma of jejunum is rare entity. Due to non specific symptoms and signs, inaccessibility to endoscopic instruments, often the diagnosis is delayed. Recently capsule endoscopy and double balloon enteroscopy has provided the diagnosis in early stages. Complete resection with lymphnodal dissection is the definitive treatment. As they are associated with poor prognosis, they should be kept in differential diagnosis of small bowel diseases, as early diagnosis and treatment help in better clinical outcome. In our case it mimicked as tuberculosis but on

histopathology it turned to be carcinoma hence, patient was kept on follow up.

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