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A Case of Ileal Adenocarcinoma Presenting as Acute Abdomen

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Abstract

Primary adenocarcinoma of small intestine is a rare malignancy constitute <1% of whole abdominal malignancies.Adenocarcinoma of small intestine will rarely produce symptoms until the disease is advanced. Preoperative diagnosis is difficult due to inaccessibility for guided biopsies.Themost frequent presentations are abdominal pain, nausea, vomiting, and weight loss. They may also present with haemorrhage, obstructive symptoms or perforation peritonitis.The low incidence and lack of pathognomonic symptoms make an accurate diagnosis small bowel carcinoma a challenge to the surgeons. In this paper we are reporting a case of ileal adenocarcinoma in a patient who presented withacute abdomen and perforation peritonitis. We are presenting it because of the rarity of the condition.

Keywords: Adenocarcinoma; Carcinoid; Lymphoma; Sarcomas or Gastrointestinal Stromal Tumours (GIST); Laparotomy; Segmental Resection; Chemotherapy; Radiotherapy.

Introduction

Primary adenocarcinoma of small intestine is a rare malignancy constitute <1% of whole abdominal malignancies. Adenocarcinoma of small intestine will rarely produce symptoms until the disease is advanced. Preoperative diagnosis is difficult due to inaccessibility for guided biopsies. The most frequent presentations are abdominal pain, nausea, vomiting, and weight loss. They may also present with haemorrhage, obstructive symptoms or perforation peritonitis.

The low incidence and lack of pathognomonic symptoms make an accurate diagnosis small bowel carcinoma a challenge to the surgeons. Adenocarcinoma of the ileum is a rare disease which has variable presentations and thus poses a challenge to our diagnostic skills.

Surgery remains the mainstay of treatment of small bowel adenocarcinoma. The role of Chemotherapy and radiotherapy is applicable only in advanced malignancy as a palliative care and its use is controversial.

Case Report

A 55 year old female presented to the emergency with chief complaints of pain abdomen, obstipation and abdominal distension for 3 days. On examination Pulse -100/min, BP- 80/60 mmHg with signs of dehydration. Abdominal examination showed distended abdomen with diffuse tenderness and free fluid. Liver dullness was obliterated, and Bowel sounds were absent.

An X-ray abdomen erect posture was performed which revealed free air under the diaphragm. USG showed free fluid in the peritoneal cavity with air and vague mass in the umbilical region.

With the diagnosis of Peritonitis secondary to

perforation & an emergency laparotomy was performed.The intra-operative findings were:

- A growth was present in the terminal ileum, 10cms proximal to the ileocaecal junction, measuring 10x7cms.

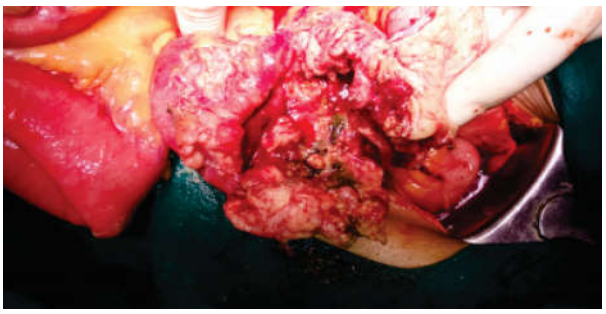

Fig. 1: Peroperative finding of perforation

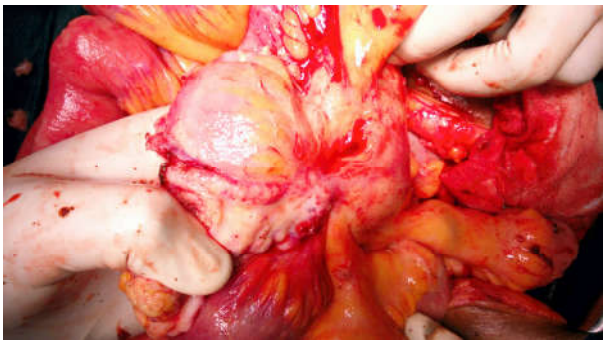

Fig. 2: Peroperative finding of the tumour

- A single large perforation was present on the anti-mesenteric border, within the growth.
- Matted mesenteric lymph node mass measuring 7x5cms present in the mesentery of the terminal ileum.

Bowel resection with an end-to-end anastomosis was performed. The resected bowel, along with the lymph nodes, was sent for histopathological examination.

Histopathology of the specimen showed adenocarcinoma with cell of origin from ileum. iHistochemistry proved the cell of origin from the ileum.

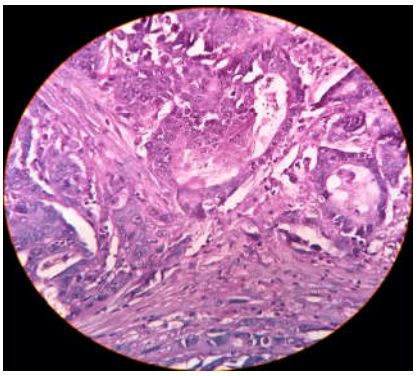

Fig. 3: Histological picture of the tumour

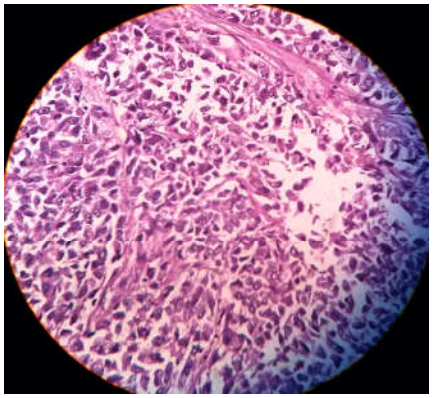

Fig. 4: High magnification of Histology

Discussion

Primary adenocarcinomas of the small intestine are rare. Though small intestine form 75% of the length of the gastrointestinal (GI) tract and 90% of its absorptive surface, malignant tumours of the small bowel comprise less than 2% of all gastrointestinal malignancies [1,2]. Historically, adenocarcinoma was the most common histological small bowel cancer subtype, now most common is carcinoid.

The different pathologic types of small bowel malignant tumours include adenocarcinomas, carcinoid, lymphoma, and sarcomas or gastrointestinal stromal tumours (GIST). Different subtypes have predilection to different regions of the small intestine. Adenocarcinomas tend to involve mainly the duodenum, while carcinoids more commonly develop in the ileum.

Symptoms of small bowel adenocarcinoma are nonspecific and frequently do not occur until advanced disease is present & preoperative diagnosis is rare. The most frequent presenting signs and symptoms include abdominal pain, nausea, vomiting, and weight loss. They may also present with haemorrhage, obstructive symptoms or perforation peritonitis [3,4,5].

Surgery remains the mainstay of treatment of small bowel adenocarcinoma. Segmental resection with 5-cm margins and complete nodal extirpation of the segment have been advocated curative surgical approach [2].

The recurrence pattern for small bowel adenocarcinoma is mainly systemic.

The role of adjuvant and neoadjuvant chemotherapy and radiotherapy consists primarily of case reports or small case series. Its benefit remains largely unknown.Chemotherapy and radiation therapy are reserved for palliation ofmetastatic

disease. Given the low prevalence of this disease, few clinicaltrials of chemotherapy have been conducted and despite a variety ofchemotherapeutic agents used to treat adenocarcinoma of the small bowel,no standard chemotherapy regimen exists for this disease [6].

Conclusion

In conclusion small bowel adenocarcinomas are difficult to diagnose because of the nonspecific symptoms. They also have a poor prognosis because most patients present with advanced disease. Primary malignant small bowel tumours may present as atypical, but highly lethal, abdominal emergencies. Treatment of such condition is emergency resection, anastomosis and adjvant chemo or radiotherapy. This case is presented because of the rarity of the disease.

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