Abstract:
We herein report a case of 61 year old female with complaints of vomiting and ball rolling movements in the abdomen. Visible gastric peristalsis was present on clinical examination but upper GI endoscopy showed normal study. On laparotomy the patient was found to have adenocarcinoma proximal jejunum with mesenteric lymphadenopathy. The clinical symptom of this case is extremely rare and has not been reported in literature previously.

Keyword: adenocarcinoma, jejunum, visible gastric peristalsis, upper GI endoscopy

Introduction: Tumors of the small intestine are remarkably rare. Even though the small bowel accounts for 80% of the length and 90% of the mucosal surface of the GIT, only 3 to 6% of the gastrointestinal tumors and 1% of the gastrointestinal malignancies arise from the small bowel. Most tumors are incidental findings.

Adenocarcinoma is usually diagnosed in the 7th decade while carcinoids and leiomyosarcoma in the 6th decade. Lymphoma is the most common malignant tumor of small bowel in children. Except for those that present as emergencies, the symptoms of small bowel tumors are nonspecific. Most frequent symptoms are weight loss, anorexia and abdominal pain. However adenocarcinoma in the jejunum rarely causes visible gastric peristalsis. Herein we present a case of adenocarcinoma jejunum, presenting with visible gastric peristalsis.

Case report: A 61 year old female was admitted with complaints of vomiting for 15 days duration. The vomitus was yellow coloured and foul smelling. There was no history of abdominal pain or abdominal distension. But she complained of ball rolling movements in the abdomen. No history of jaundice or hematemesis. There was no history of melena or bleeding per rectum. Her vitals were stable. On examination abdomen was not distended. Visible gastric peristalsis was noted. No mass was palpable per abdomen. No free fluid. Bowel sounds were heard normally.
The routine blood investigations were normal. The liver and renal function tests were within normal limits. Upper GI endoscopy was done to find out the cause of visible gastric peristalsis. But it showed normal study with a dilated stomach (Fig.1). Ultrasound scan of the abdomen and pelvis showed mild hepatomegaly with fatty infiltration, rest of the organs were normal. Then a CT scan of the abdomen and pelvis with oral and rectal contrast were taken which showed circumferential short segment wall thickening in the mid jejunum with dilatation of proximal jejunum, duodenum and stomach (Fig.2), partial obstruction at the level of thickening and a few mesenteric lymph nodes noted adjacent to the gut thickening (Fig.3).

The patient was assessed and proceeded with laparotomy. On laparotomy there was a 1cm stricture in the proximal jejunum with thickening of the wall. Few mesenteric nodes were also enlarged. There was dilatation of the proximal segment of jejunum, duodenum as well as stomach. Rest of the bowel loops and organs were normal. A 12cm long proximal jejunum including the stricture site with nodes was resected and end to end anastomosis done. The specimen was sent for histopathological examination. It revealed that the resected small bowel segment showed adenocarcinoma—moderately differentiated grade. The both cut margins were free. The mesenteric lymph nodes showed deposits from adenocarcinoma. The post operative period was uneventful. The patient had 6 cycles of chemotherapy post operatively.

**Discussion:** The benign tumors of small bowel are usually asymptomatic. Except for those presenting as emergencies, the symptoms of small bowel tumors are nonspecific. The most frequent presenting symptom of malignant tumors are weight loss, anorexia, and abdominal pain. The severity and nature of pain depends on the site and size of lesion, whether it has caused partial or complete obstruction or whether perforation has occurred. Pain may be dull aching caused by pressure from large masses as with lymphomas and sarcomas. Cramps are associated with partial obstruction caused by annular adenocarcinoma or by intussusception. Patient can also present with an acute abdomen as in perforation.
caused especially by lymphomas. Vomiting is the most characteristic symptom in case of obstructive lesions. The vomiting of large amounts of greyish green liquid containing undigested food particles is typical for obstruction near the ligament of Trietz. Carcinoids located at the root of mesentry can lead to fixation and shortening causing obstructive symptoms. Volvulus has also been reported as a presenting feature in case of small bowel malignancies. Bleeding is not as common with malignant tumors as with benign ones. Leiomyosarcoma has been reported to cause massive bleeding but this manifestation is rare. In both benign and malignant tumors the bleeding is usually occult. An abdominal mass is most frequently associated with lymphomas and leiomyosarcomas. Jaundice can occur in case of duodenal and periampullary lesions. Malabsorption and steatorrhea is secondary to extensive intestinal lymphomas. Visible peristalsis has been reported only in cases where the growth was in the lower jejunum. However in our case the growth in the proximal jejunum has lead to proximal dilatation of the jejunum, duodenum and stomach leading to visible gastric peristalsis which has never been reported in literature.

Conclusion: In conclusion, we report a case of a female with adenocarcinoma proximal jejunum with visible gastric peristalsis and upper GI endoscopy showing normal study. As the symptoms of small bowel tumors are nonspecific the surgeon needs to be “small bowel conscious” or think of proximal jejunal obstruction when visible gastric peristalsis is present but upper GI endoscopy is normal.

References:  
1 Maingot’s abdominal operations, volume II, 10th edition.