INTRODUCTION

Primary duodenal adenocarcinoma (PDC) of the distal half of duodenum is extremely rare. We report a case of a young male with adenocarcinoma of third and fourth part of duodenum presenting with long standing proximal small bowel obstruction with associated weight loss and anemia. Esophago-gastro-duodeno-scopy showed a fungating intraluminal growth in third and fourth part of the duodenum. Computed tomography also showed a solid mass in the third and fourth part of the duodenum. Computed tomography also showed a solid mass in the third and fourth part of the duodenum. Segmental resection of the third and fourth part of the duodenum was performed with single layer extra mucosal duodeno-jejunal anastomosis.

CASE REPORT

A male aged 28-years presented with the history of abdominal pain and vomiting since 4 months especially 4-6 hours after eating anything. Vomiting was projectile in nature with associated weight loss and weakness. On examination, he was of lean built and pale, with a positive succussion splash. His initial investigations showed haemoglobin of 9 gm% and ESR of 365 fall after one hour. Barium meal follow through reported dilatation and mucosal thickening in the proximal duodenum with persistent narrowing seen in the third and fourth part of the duodenum (Figure 1). Stomach, jejunum and ileal loops appeared normal. Esophago-gastro-duodeno-scopy was normal upto the second part of the duodenum with a fungating intraluminal growth in third and fourth part of the duodenum. Biopsy from the growth confirmed a well-differentiated adenocarcinoma. CT scan showed an isodense area measuring 4 x 4 cm causing partial obstruction of the duodenum with proximal dilation. Lymph nodes measuring less than 1 cm were seen around the mass in the mesentry. No evidence of infiltration of surrounding structure was noted.

Surgical intervention was planned. On exploration, growth was found in the third and fourth part of the duodenum (Figure 2). Segmental resection of the third and fourth part of the duodenum was performed with single layer extra mucosal duodeno-jejunal anastomosis. Patient recovered well and was discharged on 7th postoperative day. Histopathology confirmed well-
differentiated adenocarcinoma of the third and fourth part of the duodenum with reactive changes in the lymph nodes. Followed for a period of 6 months, no complication was recorded and the patient refused for chemotherapy radiation.

**DISCUSSION**

Duodenal tumours are unique rare tumours and include benign leiomyoma, carcinoid and malignant adenocarcinoma. The most common manifestation is severe iron deficiency anemia. Barium meal follow-through and esophago-gastro-duodenoscopy along with biopsy are effective diagnostic measures to confirm the diagnosis in most of the instances. However, the lesion of the distal duodenum may remain elusive to endoscopy, requiring repeated endoscopies for confirmation of diagnosis. CT provides a comprehensive view of any possible gastrointestinal tract (GIT) pathology as it permits demonstration of the lumen, wall and adjacent extramural structures. CT appears to be a reliable method for predicting duodenal tumour resectability. PDC is generally considered to have a low resectability rate especially distal duodenal tumour are less curable by resection surgery because of invasion of small bowel mesentry. Long-term survival for patients with duodenal adenocarcinoma can be achieved by surgical procedure that produces negative resection margins. PDC as well as other carcinomas in the pancreatic head are managed by standard curative pancreaticoduodenectomy to achieve this goal for most of the lesion and segmental resection has a limited role. In selected patient segmental resection or local resection of the duodenum is indicated as in this case.

Duodenal segmental resection is a straight forward and safe procedure for the treatment of adenocarcinoma of the third and fourth part of the duodenum having a low morbidity and mortality and may be preferred to standard pancreaticoduodenectomy. Early primary duodenal carcinoma can be treated by endoscopic resection as well. Survival depends upon the tumour size, advanced histological grade, and transmural invasion, but nodal spread is not a contraindication to resection. Adjuvant chemo-radiotherapy for node-positive duodenal adenocarcinoma after pancreaticoduodenectomy and segmental resection may improve local control and median survival but does not appear to improve overall survival.

**REFERENCES**


