**Original Research Paper** 

Medical Science



## A RARE CASE OF SPONTANEOUS PEPTIC PERFORATION AT GASTROESOPHAGEAL JUNCTION IN ADULT

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**ABSTRACT** Peptic ulcers are erosions in the GI mucosa that extends through the muscularis mucosae.4 Most common symptoms of peptic ulcer disease is dyspepsia but can be complicated by bleeding, gastric outlet obstruction, fistulization and perforation. The incidence of gastric perforation at gastroesophageal junction is < 10%. A thorough clinical examination with radiological investigations can help diagnose peptic perforation and its complications early and reduce the overall mortality rate. Here we report a rare case of spontaneous gastric perforation at GE junction in a 33 year old male patient.

## **KEYWORDS**: PUD, peptic, ge junction

### INTRODUCTION

Peptic ulcer disease (PUD) comprises of gastric ulcers and duodenal ulcers. Gastric ulcers can occur at any location in the stomach, ones occurring at gastroesophageal junction are rare. There is scarce documentation of such cases in literature. They are not associated with excessive acid secretion. Surgical intervention is required for complications arising from gastric ulcer disease. Diagnosis of these ulcers is likely to be missed due to their location even on laparotomy. Exploratory laparotomy is the management for perforated gastric ulcers.

#### Case Report

A 33 year old male presented to our emergency with complain of generalized abdominal pain for three days which was sudden in onset, colicky, initially mild and then becoming severe in intensity, not associated with nausea, vomiting, constipation and not aggravated or relieved by any factors. He was non alcoholic and non smoker. He denied any history of recurrent episodes of heartburn or any previous treatment for epigastric pain.

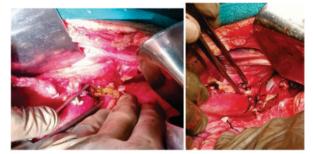
On presentation, the patient was conscious and oriented. On recording his vitals he had tachycardia of 110/min, blood pressure of 138/88 mmhg and afebrile. His abdomen wasdistended with generalized tenderness without any guarding or rigidity. Bowel sounds were present and normal.

Blood investigations were sent and were found to be within normal limits. An abdominal radiograph was done which revealed free air under diaphragm.



On this basis, gastrointestinal perforation with peritonitis was suspected and the patient was taken up for emergency laparotomy. On exploration, 500 ml of bilious peritonitis was

found and drained. A gastric perforation of size approximately  $1.5 \times 1$  cm was found on the anterior surface at the lesser curvature just distal to the gastroesophageal junction. Rest of the intra abdominal organs were found to be normal.



A thorough lavage with normal saline was done. Margins of the perforation were sent for biopsy. The gastric perforation was repaired primarily by Graham patch repair using silk 2-0. A 14 FG ryles tube was put. A feeding jejunostomy was done 30 cms distal to duodeno-jejunal junction. Drains were placed. Immediate post operative period was uneventful. On third post operative day, the patient took discharge against medical advise. His further post operative course has been uneventful.

#### DISCUSSION

Most common cause of spontaneous peptic perforation is peptic ulcer disease that includes gastric and duodenal perforation. The major causes being NSAID overuse and h.pylori infection. The incidence of peptic ulcer disease (PUD) is estimated to be  $\sim$  1.5-3%, the lifetime prevalence of perforation is  $\sim$ 5% and mortality ranges from 1.3 to 25%.3 30-50% of ulcer perforations are associated with NSAIDS. Bleeding, perforation, or gastric outlet obstruction are the main complications of peptic ulcer disease. Perforation typically presents with sudden onset of intense pain in the upper abdomen. Dependent on age and comorbidity, mortality can be as high as 20%.Gastreic ulcers can occur at any location in the stomach although lesser curvature is the most common site. On the basis of location gastric ulcers are classified into 5 types.4 Type 1 ulcers are located on lesser curvature with an incidence of 60%. Ulcer on gastric body with a duodenal ulcer are type 2 ulcers(15%).

Type 3 ulcers are those found on prepyloric region which account for 20%. Type 4 ulcers are rare and found higher up on lesser curvature, near gastroesophageal junction and account for less than 10% of the total. Type 5 ulcers are those ulcers associated with NSAID use and can occur anywhere. Furthermore, there may be some ulcers that occur on greater curvature of the stomach which account for approximately less than 5%. In our case, the perforation was found higher up at the gastroesophageal junction on the lesser curvature. The closest differential diagnosis for perforation at this site is Boerhave syndrome. In this patient there was no history of binge alchol intake or sudden retching which ruled out this diagnosis. A peptic perforation at gastroesophageal site is a rare occurrence as was found in our patient with paucity of documented cases in literature. A peptic perforation at such a location as gastroesophageal junction is very likely to be missed.

Management of suspected cases of gastrointestinal perforation remains exploratory laparotomy.

#### CONCLUSION

Peptic perforation are a well known complication of peptic ulcer disease and commonly encountered surgical emergency that requires urgent intervention. With improved medical treatment of PUD the incidences are on decrease. Suspected cases of peptic perforation require a thorough exploration so that perforations at rare sites are not missed.

### Conflict of Interest : None declared

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