

# A Rare Case of Acute Perforation of Gastrojejunal Ulcer

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## Abstract

Stomal ulcers occur after gastroenterostomy or gastrectomy of the Billroth II type. The jejunal loop is exposed directly to the gastric acid, so the ulcer is usually found on the jejunal side of the stoma. Gastric staple line disruption, marginal ulcer, hemorrhage and stomal stenosis are well known complications of gastrojejunostomy but ulcer perforation is a rare entity.

## INTRODUCTION

Reflux of duodenal contents occurs to some extent in normal individuals but markedly increases after surgery for peptic ulcer disease due to ablation, destruction, or bypass of the pyloric sphincter.<sup>2</sup> Gastrojejunal stomal ulcer is commonly found on the jejunal side of the stoma.<sup>1</sup> Direct exposure to gastric acid is the main cause of ulcer formation. NSAID and smoking also increase the risk of ulcer formation.<sup>3</sup> These patients may present with upper G.I. bleeding because of hemorrhage from the ulcer site or with perforation, which is very rare.

## CASE REPORT

A 60-year-old male occasional smoker presented with pain in the left side of the upper abdomen with one episode of vomiting and slight abdominal distension for one day. He had swallowed one tablet Diclowin (diclofenac+ paracetamol). There was no history of trauma, fever and chest pain. Twenty years before, closure of perforation and an anterior gastrojejunostomy had been performed for a large perforated ulcer of duodenum.

On admission, temperature was 97.4°F, pulse 90/min., respiration rate 20/min. thoracic, and B.P. 130/90mmHg. On examination, there was a vertical scar mark present over the right paramedian region. The whole abdomen was distended and tender but tenderness was marked at the left lower quadrant. Muscle guarding, rigidity and rebound tenderness was present over the whole abdomen with obliterated liver dullness. Bowel sounds were absent. Hernial orifices and

genitalia were normal. P. R. examination was normal. Chest x-ray showed free gas under the right dome of the diaphragm. USG showed distended bowel loops and free fluid in both flanks and pelvis. After initial resuscitation, the patient was shifted to the operating room for exploratory laparotomy. Right upper paramedian laparotomy was done. On exploration, there was a large (1.5x1.5cm) perforation at the efferent jejunal side of the old gastrojejunostomy. The perforation was repaired and reinforced with a tag of omentum. Ryle's tube was placed in the efferent loop. Thorough peritoneal lavage was done and two intraperitoneal drains were placed. The course was uneventful postoperatively.

## DISCUSSION

In the past, vagotomy and gastrojejunostomy or pyloroplasty were the standard treatment for peptic ulcer disease. Laparotomy and closure of perforation with reinforcement with omental patch still remains the treatment of choice for perforated peptic ulcer. Stomal ulcers are very infrequently seen today as the numbers of vagotomy and gastrojejunostomy have fallen down with the concept of H. pylori and medical treatment has been introduced successfully.

Those patients who have undergone vagotomy and gastrojejunostomy in the past now are reviewed by endoscopy examination to detect stomal ulcers. Yet, these patients are expected to have complications like hemorrhage, perforation, retrograde intussusception, retroanastomotic hernia and adhesions. The gastrojejunal ulcer manifests itself first by hemorrhage and shortly afterwards by perforation.<sup>4</sup>

In a review of literature, Toland and Thompson (1936) found 93 authentic reports of acute perforation in gastrojejunal ulcers and stated that usually the interval between the performance of gastrojejunostomy and the acute perforation of gastrojejunal ulcer varied from 5 days to 18 years.<sup>5</sup> The acute perforation of gastrojejunal ulcer was preceded by no prodromal symptoms beyond slight bleeding producing vertigo, followed by massive hemorrhage. The site of pain in the acute perforation is in the left lower quadrant. In our case, the site of pain was initially in the left hypochondrium, then in the left lower quadrant and then over the whole abdomen. On examination, maximal tenderness was found in the left lower quadrant. These findings are characteristic and are due to the fact that the fluid escaping from the perforation passed downwards to the left of the vertebral column beneath the omentum.

In the majority of cases, gastrojejunal ulcer is anastomotic. But in our case, the ulcer was on the jejunal side of the old gastrojejunostomy on the efferent loop of the jejunum, close to the anastomotic site.

### **References**

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