

Case Report

Gastro-jejunal with jejuno-jejunal anastomoses for treatment of the case of cascade stomach

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ABSTRACT

The cascade stomach (CS) is characterized as a changing of the gastric cavity to the “hour glass” two chambers formation. The disease is well presented in the gastroenterological and radiological literature. In the case of failure of conservative treatment, the surgery is indicated. Unfortunately, the information of operative treatment of this condition is limited. We present the case of the CS successfully treated by creation of the gastro-jejunal and jejuno-jejunal anastomoses.

Keywords: Cascade stomach, Case report, CT scan, Endoscopy, Surgical treatment, Gastro-jejunal, Jejuno-jejunal anastomoses

INTRODUCTION

Cascade stomach can be developed congenitally or due to the functional deformation. The organic disorders are mentioned as well. The result of those processes is pouch-like transformation of fundus and tubular deformity of body of stomach.^{1,2,6} The condition is known as “champagne cup deformity” or “cup and spill stomach”.³

Fluoroscopy, endoscopy and computed tomography (CT) scan are demonstrating good results to diagnose and investigate this rare pathology.⁷⁻¹¹

The described number of cases, incidence and information about association with others pathology, risk factors, medical and surgical treatment is limited.^{5,6,8,9,12,16}

Unfortunately, there is no international treatment guidelines.

CASE REPORT

A 55 years old male presented with epigastric pain on and off, associated with heartburn and vomiting for 3 weeks.

Physical and systemic examination were unremarkable. Routine hematological and ultrasonic abdominal investigations were normal. Upper GI endoscopy revealed irregular, edematous and congested gastric mucosa which bled easily on scope touch.

Abdomen CT scan was done, and showed prominent gastric dilatation, cascade stomach, dorsal fundus pouch associated with pyloro-duodenal mural asymmetric wall thickening causing luminal narrowing.

This case was managed with exploratory laparotomy by gastropexy, gastro-jejunostomy and jejuno-jejunal anastomoses with very good outcome.

There was complete resolution of symptoms after 6 months of following up.

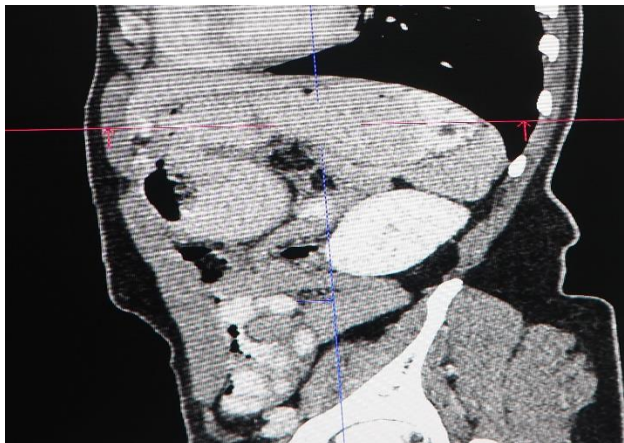


Figure 1: Abdomen CT scan showing the “cup and spill stomach” biloculated gastric cavity dilatation with the pyloro-duodenal mural asymmetric wall thickening causing luminal narrowing.

DISCUSSION

Unfortunately, the information about incidence of CS is very little. Some cases of CS were found incidentally or during investigation of patients with the upper gastrointestinal symptoms.^{1,2,11}

The age range was 20–80 years and predominating male to female.^{1,12} But still needs further discussions.

There are no specific symptoms of CS. Epigastric pain, nausea, vomiting, dyspepsia, gastroesophageal reflux, heartburn, was reported.^{1,6,9,15}

In CS cases the pathologies as intra-abdominal adhesions, gastritis, gastric volvulus, gastric and duodenal ulcer and diverticulum, transient lower esophageal sphincter relaxation, hiatal hernia, gastric and pancreatic malignancy, choledocho-duodenal fistula were reported.^{3-5,11-13,19}

The upper gastrointestinal contrast fluoroscopy is very effective as the basic diagnostic investigation.^{1-3,7} Others authors found upper endoscopy as additional and helpful diagnostic methods as well.^{3,8,9}

Unfortunately, offered medical treatment as dietary adjustments, antacids, H2 blockers, PPI, antispasmodics is not always getting success.¹

CS was successfully treated with laparoscopic Nissen’s fundoplication, open and laparoscopic creating gastro-gastric anastomosis, open and laparoscopic gastric sleeve resection, laparoscopic adhesiolysis, gastropexy and gastrojejunostomy.^{1,15-19}

The published surgical procedures have been demonstrating optimistic results but number are limited.

Despite of the reported and used conservative and surgical treatment there is no international treatment guideline until now, and we do not have established protocols or recommendations.

CONCLUSION

Cascade stomach is rare pathology in the surgical practice. The symptoms are non-specific. The performed gastro-jejunal and jejuno-jejunal anastomoses is worldwide well-known surgery and treated the CS patient with good outcome. The further study and sharing of international experience will help to create the guideline for the surgical treatment of this disease.

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