

"Cascade Stomach": Laparoscopic Treatment

The "cascade stomach" consists in a biloculation of the gastric cavity into a ventral (corpus and antrum) and a dorsal (fundus) recess (1,2). Some authors associate this condition with gastric volvolus, while others consider that it is an inherent anomaly (1,3). Various causative factors have been reported in the literature (1-5).

Our case concerned a 16-year-old boy who complained of postprandial epigastric pain, dyspepsia and nausea, relieved by the supine position. This had continued for about 1 year, and the patient experienced a weight loss of about 10 kg in the last 4 months. An upper gastrointestinal series (Figure 1) and a spiral computed tomography (CT) scan made the diagnosis easy.

We decided to treat the posterior displacement of the gastric fundus by surgically repositioning it in the anterior plane and anchoring it to the anterior wall of the corpus by means of a gastro-gastric anastomosis; this procedure allowed the restoration of optimal gastric emptying. We preferred not to perform a partial gastrectomy, which would necessarily have abolished the fundal secretion. We chose the laparoscopic technique because the young age

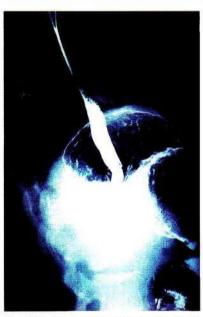


Figure 1: Upper gastrointestinal series; lateral view. Enlarged, dysmorphic stomach, with a "cascade" configuration (posteriorly displaced fundus and anteriorly located corpus); stasis of the contrast medium on the posterior wall, presence of a gastric bulla in the anterior portion of the stomach and abnormal length of the intra-abdominal portion of the esophagus.



Unusual Cases and Technical Notes 593

and good general condition of the patient and the absence of previous abdominal surgery met the indication criteria. Mobilization of the gastric fundus did not require section of the vasa brevia, which is sometimes necessary to position the fundus in the ventral plane. No intra-abdominal adhesions were detected, thus substantiating the theory of the acquired nature of this condition. The procedure was uncomplicated.

A follow-up upper gastrointestinal series obtained on the 8th postoperative day (Figure 2) and an EGDS confirmed the patency of the anastomosis. At the 3-month follow-up the patient reported complete resolution of symptoms and a 3-kg weight gain.

In conclusion, we recommend our procedure as the treatment of choice for "cascade stomach," given its feasibility and excellent clinical outcome.

G. Battisti¹, G. Natali², A. Manno¹, F. Stio¹, G. Palazzini¹, A. V. Granai¹, T. Scaldaferri¹, C. Porcelli¹, R. Gabatel¹, S. Messinetti¹



Figure 2: Postoperative upper gastrointestinal series; left anterior oblique projection. The study reveals the optimal patency of the anastomosis and the absence of the posterior gastric recess. The arrows indicate the gastric fundus turned anteriorly.

- ¹ III Surgical Dept., VI Surgical Division, University of Rome "La Sapienza", Rome, Italy
- ² Dept. of Radiology, S. Filippo Neri, Hospital of Rome, Rome, Italy

References

- Grilli A. Compendio di Radiologia Medica. 2nd ed. Rome: Società Editrice Universo, 1971; 707.
- Benassi E, Juliani G. Elementi di radiologia medica. Turin: Minerva Medica Edizioni, 1985; 355-6.
- Sirakov V, Stefanov R, Shipkov C. The most common cause of cascade stomach. Folia Medica 1994; 36: 37-9.
- 4. Rusanov AA. Cancer of the stomach. Leningrad: Meditsina, 1979; 87–92.
- Oster AN, Rizacv MN. Roentgenographic semiotics of stomach diseases. Tashkent: Meditsina, 1987; 47–58.

Corresponding Author G. Battisti, M.D. Via Dandolo 71 00153 Rome, Italy Fax: +39-6-49970402