

# A non-obstructive gastric antral web case detected after upper gastrointestinal system bleeding

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Dear Editor,

This is the first study on the construction of the relationship between a non-obstructive gastric antral web and gastric-outlet obstruction in children and adults.

Congenital or acquired gastric antral webs (GAWs) may cause gastric-outlet obstruction in children and adults. Endoscopic methods are often used in the treatment of obstructive GAWs. We report the case of a patient with a congenital non-obstructive antral gastric web. The patient was a 25-year-old male with gastrointestinal hemorrhage followed by dyspeptic complaints. There was a follow-up period for the patient after treatment. Because GAWs are encountered and rarely reported in the literature, the images taken during endoscopic surgery of the patient, as a significant contribution to the literature, are also presented.

The GAWs is a resident mucosa ring in the distal stomach (gastric antrum), which may cause gastric-outlet obstruction. It is also called as "gastric antral diaphragm," the peripheral ring of the mucosa. GAWs are rarely encountered. It also has a close relationship with trisomy 21 and immunodeficiency syndromes. Radiologically, a smooth and fine narrowing was observed during fluoroscopy at about 2 cm from the pylori in the gastric antrum. It may results an appearance of "double duodenum" in the case at which web is massive. Webs may be clinically asymptomatic or may cause gastric-outlet obstruction. Symptomatic webs can be treated by upper gastrointestinal (GIS) endoscopy. The characteristic webs must be diagnosed, without confusion, with gastric carcinomas and pyloric stenosis (1-3).

A 25-year-old male patient was treated by the administration of intensive non-steroidal anti-inflammatory drugs and antibiotics during a month before admission to Medipol University Hospital Gastroenterology clinic. The previous treatment of this patient was followed by hospitalization due to the GIS bleeding in another medical center, and he was discharged. The complaints of this patient were stomachache, bloating, and early satiety. Non-obstructive gastric antral web (GAW) was observed during upper gastrointestinal endoscopy. Superficial ulcers and erosions around the GAW and erosive gastritis in the pyloric antrum were detected. Duodenal ulcers were present in the aphthous character. Biopsies taken from both regions were denoted as gastric mucosa. Gastric and duodenal lesions were developed during control endoscopy performed after the eradication of *Hp* in the tissue of the patient with *H. pylori*. Congenital genetic disease was not detected in the patient. The endoscopic images of the case are shown in Figure 1.

Gastric antral web (GAW) is a rarely encountered complaint, which is the cause of gastric-outlet obstruction in both adults and children. The incidence frequency in the esophagogastroduodenoscopy series of 24640 cases was found as 0.14% by Shannon et al. The double bulb image during endoscopy was characterized as a characteristic "double bulb sign." Only five of 34 of these cases were found to have gastric-outlet obstructions, and the remaining 29 patients had non-obstructive GAW (4). GAWs may be considered in adult cases as either congenital or acquired lesions (5). Complete GAWs leading to gastric-outlet syndrome may be treated using endoscopic methods such as balloon dilatation, standard biliary needle-knife, and multiple incisions with electrocautery.

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**Figure 1.** The endoscopic images of the case

Surgical treatment is an alternative, if required (6). Our patient was thought to have a non-obstructive congenital antral web. Patients with non-steroidal GIS bleeding were followed up after the treatment.

**Informed Consent:** Written informed consent was obtained from the patient who participated in this study.

**Peer-review:** Externally peer-reviewed.

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