Laser treatment of congenital esophageal stenosis and web at the upper esophageal sphincter

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Dear Editor,

Congenital esophageal stenosis is an uncommon anomaly and usually diagnosed in infants. Its incidence is 1 per 25,000 live births (1). The symptoms include dysphagia, vomiting, regurgitation, food impaction, and respiratory problems; the severity of the symptoms is variable and depends on the degree of stenosis (2,3). Some patients

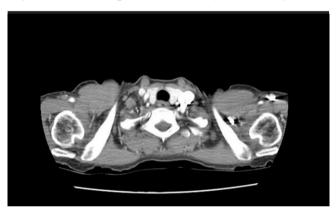


Figure 1. Chest computed tomography imaging revealed muscular thickness at the upper esophageal site.

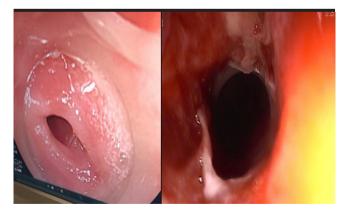


Figure 2. Endoscopic images of the stenosis site before (a) and 1 week after (b) the procedure.

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get adapted to these symptoms, leading to a delayed diagnosis and treatment (1,4).

A 51-year-old female had dysphagia since birth that can be adapted with food habits. She could not eat any solid food and had lung problems such as asthma. She was admitted to our hospital when she could not consume liquids, as they caused cough, dysphagia, and vomiting. There was no history of caustic material exposure. We performed upper gastrointestinal endoscopy that showed a circumferential stenosis at the upper esophageal sphincter site; thus, we could not pass the endoscope into the lumen. We did not perform barium esophagogram because of aspiration risk. Chest computed tomography showed muscular thickness at the upper esophageal site (Figure 1). We performed 18-mm balloon dilatation for the treatment of stenosis, but it was not successful. The patient was treated without any complications using Holmium-YAG laser with 0.8 J 10 Hz short pulses; the membranous and fibromuscular congenital stenosis that extended 3 cm distally from the upper esophageal sphincter was cut and opened using the laser. We could not access the distal lumen because of edema during operation. Oral intake of liquid food was started for the patient 24 h postoperatively, and she had no problems. We performed upper gastrointestinal endoscopy 1 week after this procedure and could easily pass the endoscope through the distal lumen, stomach, and duodenum (Figure 2).

In conclusion, laser treatment is an applicable, feasible, and effective treatment modality for congenital esophageal stenosis; furthermore, it seems to be superior to surgery in terms of uncomplicated, mortality and morbidity.

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

Peer-review: Externally peer-reviewed.

Conflict of Interest: The author has no conflict of interest to declare.

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