Novel, double-lumen removable stent to treat caustic esophageal stenosis

Recurrent esophageal stenosis following caustic injury may be difficult to treat. A tube stent developed at our institution [1] can be used as an alternative to repetitive endoscopic esophageal stricture dilation. The case of a boy with severe larynx and esophageal caustic injury at the age of 2 years is reported here.

Endoscopy (● Fig. 1a) and radiography (● Fig. 2a) performed 3 weeks after the accident showed esophageal stenosis. Within the subsequent 4 months, the patient underwent six endoscopic esophageal Savary–Gillard bougienage dilation procedures (up to 7–9 mm) under radiographic control (● Fig. 2b) without long-term restoration of the esophageal lumen. At 5 months, esophageal stenosis was still present (● Fig. 1b) and the patient tolerated only a liquid diet. Thus, the patient underwent implantation of a double-lumen, variable-diameter, perforated nasogastric tube stent (● Fig. 3) under radiographic control (● Fig. 2c).

Tolerability of the tube was satisfactory. The patient accepted the proximal end of the tube extending from the nose, tolerated a semiliquid diet, and gained weight without the need for additional gastric tube feeding (● Fig. 4).

The tube was removed after 5 months, and endoscopy showed restoration of the esophageal lumen (● Fig. 1c). At 6 months after tube stent removal, the patient tolerated a normal diet and gained weight (● Fig. 4). Radiography showed no esophageal stenosis (● Fig. 2d), and endoscopy revealed rigidity and cicatrization of the...
esophageal wall with no difficulty in passing the endoscope (Fig. 1 d).

The presented case shows that providing long-term artificial support to prevent narrowing of the esophageal lumen can restore the function of the esophagus and eliminate the need for repeated esophageal dilation. A similar approach has been described in the literature [2–5]. However, to the best of our knowledge, none of the devices used by other authors are commercially available.

Competing interests: None

References

Marek Woynarowski1,
Maciej Dadalski1, Violetta Wojno1,
Mikołaj Teisseyre1, Leszek Hurkała2,
Emil Płowiecki2

1 Department of Gastroenterology
Hepatology and Feeding Disorders,
Children’s Memorial Health Institute,
Warsaw, Poland
2 Balton sp. z oo. Warsaw, Poland

Bibliography
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Corresponding author
Marek Woynarowski, MD, PhD
Department of Gastroenterology Hepatology
and Feeding Disorders
Children’s Memorial Health Institute
Al. Dzieci Polskich 20
04-730 Warsaw
Poland
Fax: +48-22-8157382
m.woynarowski@czd.pl

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