

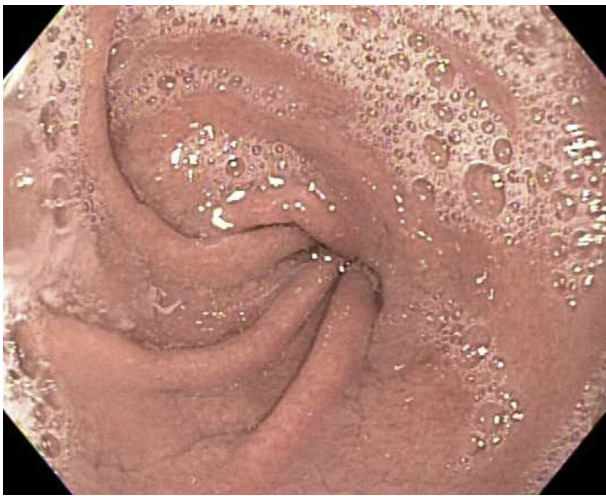


## Endoscopic closure of a large perforation during pneumatic dilation of a sleeve gastrectomy stricture

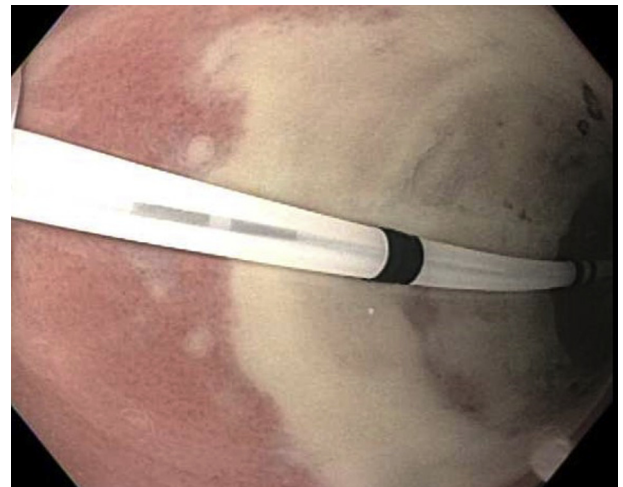
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Stenosis after sleeve gastrectomy classically occurs at the incisura, with a reported incidence of up to 7%.<sup>1</sup> With the increasing popularity of sleeve gastrectomy, the prevalence of this adverse event continues to rise.

Symptoms of obstruction can occur depending on the severity of the narrowing. This diagnosis is typically made by endoscopy or upper-GI series. Endoscopic dilation with a pneumatic balloon is the primary mode of



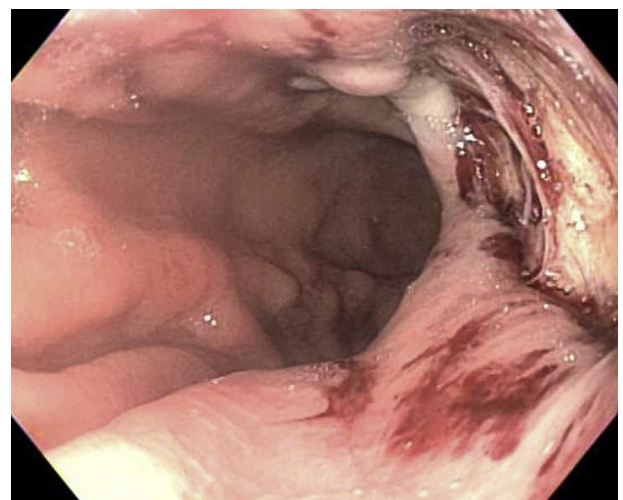
**Figure 1.** Severe stenosis at the level of the incisura.



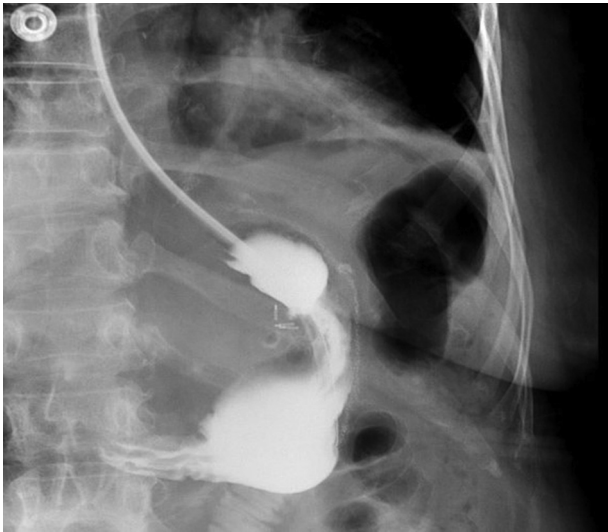
**Figure 3.** Rapid extension proximally of severely discolored mucosa during pneumatic dilation.



**Figure 2.** Pneumatic dilation of sleeve stricture.



**Figure 4.** Large perforation visualized on the lesser curvature side of the gastric wall, opposite the suture line.



**Figure 5.** Upper-GI series demonstrating no evidence of active or ongoing leak.

management; however, perforation rates are not insignificant.<sup>2,5</sup> Here, we demonstrate pneumatic dilation complicated by a large gastric perforation that was successfully closed by endoscopic suturing (Video 1, available online at [www.VideoGIE.org](http://www.VideoGIE.org)).

A 71-year-old woman with a history of laparoscopic sleeve gastrectomy performed 1 year earlier presented with nausea, vomiting, reflux, and inability to tolerate oral intake. Index endoscopy demonstrated severe stenosis at the level of the incisura (Fig. 1). Dilation with a hydrostatic balloon followed by a pneumatic balloon was performed (Fig. 2). With the balloon inflated less than 1 minute, the gastric mucosa was noted to have a severely discolored appearance, which rapidly extended proximally (Fig. 3). This was a sign of impending perforation.

The balloon was immediately deflated, and a large 5-cm × 3-cm perforation was visualized on the lesser

curvature side of the gastric wall, opposite the suture line (Fig. 4). Endoscopic suturing with a running stitch was performed in a distal-to-proximal direction, with successful closure. An upper-GI contrast study demonstrated no evidence of active or ongoing leak (Fig. 5).

In conclusion, endoscopic suturing for closure of a large gastric perforation after pneumatic dilation of a sleeve gastrectomy stricture is a novel, technically feasible, and effective treatment negating the need for surgical revision.

## DISCLOSURE

*Dr Schulman is a consultant for Apollo Endosurgery, Boston Scientific, and MicroTech.*

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<https://doi.org/10.1016/j.vgje.2019.03.016>