Combined antegrade-retrograde endoscopic recanalization of a completely obstructed esophagus

Figure 1. **A**, Complete esophageal obstruction at upper esophageal sphincter. **B**, Absence of transillumination in antegrade endoscope across the stricture. **C**, Fluoroscopic image revealing a 2-cm-long obstructive stricture. **D**, Endoscopic blunt dissection with pediatric needle-knife. **E**, Fluoroscopic image confirming alignment during blunt dissection. **F**, Transillumination seen in retrograde endoscope across stricture. **G**, Needle-knife electroincision under guidance of transillumination.

Occlusive upper esophageal strictures after radiation for the treatment of head and neck cancers pose a challenging surgical conundrum with poor outcomes. Various endoscopic techniques have been described to manage these strictures, with combined antegrade-retrograde recanalization gaining steam as a viable option. We report a techni-

cally challenging case of an occlusive upper esophageal stricture managed endoscopically ([Video 1](http://www.VideoGIE.org), available online at www.VideoGIE.org). The patient presented with complete esophageal obstruction at the level of the upper esophageal sphincter ([Fig. 1A](#)) after surgery and radiation for head and neck cancer. Combined

Written transcript of the video audio is available online at www.VideoGIE.org.

antegrade-retrograde recanalization was attempted through the patient's gastrostomy tract, but transillumination across the stricture was absent (Fig. 1B). Fluoroscopy revealed a 2-cm-long obstructed segment (Fig. 1C). Gentle blunt dissection with the tip of a pediatric needle-knife was performed at the downstream end of the stricture under endoscopic (Fig. 1D) and fluoroscopic (Fig. 1E) guidance, allowing advancement of the retrograde endoscope until clear transillumination was achieved (Fig. 1F). This transillumination was then used to guide needle-knife electroincision to recanalize the esophagus (Fig. 1G), followed by guidewire-directed dilation. This case demonstrates that when the length of the stricture precludes clear transillumination, blunt dissection of the downstream aspect of the stricture may facilitate recanalization. Combined antegrade-retrograde endoscopic esophageal recanalization in the endoscopy

suite is feasible and highly beneficial for many patients without treatment alternatives.

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Akshay Shetty, MD, Brenda J. Hoffman, MD, B. Joseph Elmunzer, MD, Medical University of South Carolina, Charleston, South Carolina, USA

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