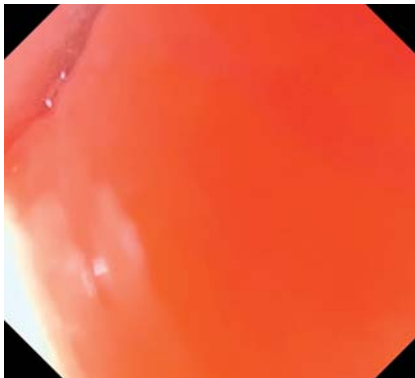
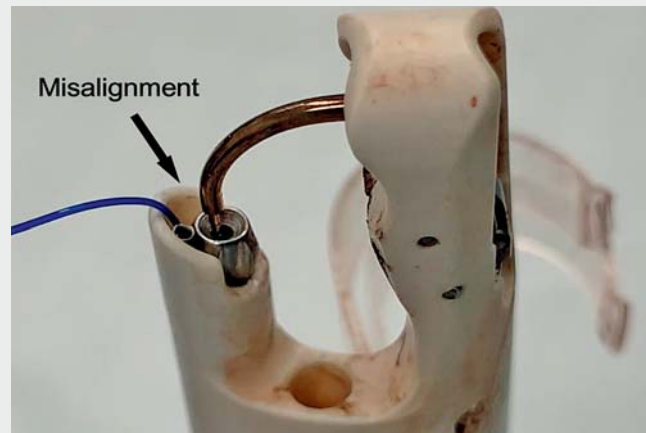


## Rescuing the impacted endoscopic suturing device during endoscopic sleeve gastropasty

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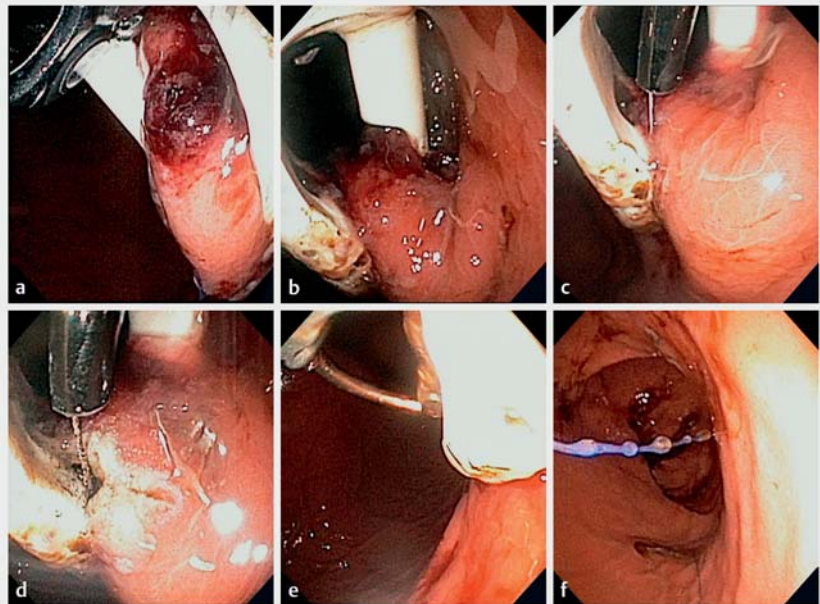
► **Fig. 1** Obscured endoscopic views (red-out) following the second bite with the endoscopic suturing device, despite manipulation of the gastroscope and endoscopic suturing device.



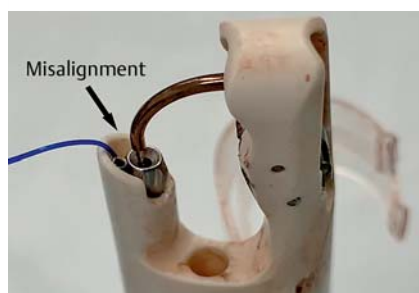
► **Video 1** Rescue of an impacted endoscopic suturing device during endoscopic sleeve gastropasty.

A 57-year-old woman underwent endoscopic sleeve gastropasty using an endoscopic suturing device attached to a single-channel adult gastroscope. During the second bite, both the needle driver opening function and anchor exchange mechanism failed. This resulted in impaction of the device in the gastric wall and a “red-out” that obscured the visual field. An ultra-slim gastroscope was inserted transorally, enabling visualization of the impacted device (► **Fig. 1**, ► **Video 1**). A needle knife was passed through the channel port of the endoscopic suturing system and used to transect through the entrapped gastric tissue. Mini-forceps inserted through the ultra-slim gastroscope were used by a second endoscopist to manipulate the needle-knife catheter to extend the incision laterally and down to the level of the needle driver, thereby releasing the impacted device from the gastric wall (► **Fig. 2**).

Ex-vivo examination revealed that the suture needle had become embedded between the anchor exchange catheter and the channel of the endoscopic suturing device (► **Fig. 3**). This caused a misalignment between the needle driver



► **Fig. 2** **a, b** View of the impacted endoscopic suturing device from an ultra-slim gastroscope inserted beside the adult gastroscope. **c–e** Needle knife inserted through the channel of the endoscopic suturing device, used to resect through entrapped gastric tissue under direct visualization from an ultra-slim gastroscope. **f** Trailing suture, which was cut with argon plasma coagulation, thereby freeing the entire endoscopic suturing mechanism from the gastric wall.



► **Fig. 3** Ex-vivo examination of the endoscopic suturing device, revealing that the suture needle had wedged between the channel of the endoscopic suturing device and anchor exchange catheter. This resulted in a misalignment between the anchor exchange catheter and needle driver.

and anchor exchange. Although misalignment occurs in 8.4% of cases [2], it can be salvaged by retracting the anchor exchange a few centimeters before re-engaging the needle driver. In our case, the lodged suture needle created a fixed misalignment that could not be rectified. We show that a needle knife can be used safely to free an impacted device under direct endoscopic visualization, preventing the need for emergency surgical intervention.

Endoscopy\_UCTN\_Code\_CPL\_1AH\_2AK

### Competing interests

The authors declare that they have no conflict of interest.

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