Use of a homemade endoscopic guillotine to cut through a nasogastric tube inadvertently sutured to a colon–gastric anastomosis

Suturing a nasogastric tube (NGT) while creating a surgical anastomosis is a rare complication. Once this has occurred however endoscopic removal of the NGT for the patient’s relief can be very challenging.

A 41-year-old man who had previously undergone esophago–colon–gastroplasty because of a congenital esophageal stricture underwent further surgery on the proximal colon–gastric anastomosis (CGA) because of malfunctioning of the previously created anastomosis. He was referred again because it had not been possible to remove the 14-Fr NGT that had been left in place while the CGA had been sutured.

It was still proving impossible to remove the NGT 21 days after surgery. An endoscopy was therefore performed and during this procedure, a Vicryl 3/0 stitch was seen in close proximity to the NGT, suggesting that the NGT had been inadvertently sutured into the CGA.

A homemade device in the form of an endoscopic guillotine, previously described as being successful in trimming plastic biliary stents [1], was used to cut the NGT. The endoscopic guillotine is made by combining the metal sheath from a mechanical lithotriptor (Innoflex IGL 1957M, 7 Fr, 165 cm) and a polypectomy snare (Olympus SD-210U-15, loop diameter 15 mm, 230 cm) from which the outer plastic sheath has been stripped and the handle removed. The snare is inserted into the metal sheath and connected to the crank, in the same way as a Dormia basket is usually loaded for lithotripsy.

First the end of the NGT was brought out through the mouth of the patient. It was then looped with the snare (Fig. 1a) and used as a guide for the endoscope until the desired point for cutting of the NGT is reached (Fig. 1b). Once the loop was in the desired position, the crank handle of the lithotriptor was gradually turned (Fig. 1c)
until the NGT had been completely severed (Video 1). The truncated NGT was then easily retrieved. Surprisingly, when it was examined a Vicryl stitch that had also been cut off was found close to the cut end (Fig. 2). The distal part of the NGT was left in place and subsequently migrated spontaneously.

Video 1

The nasogastric tube (NGT) is looped within the snare and used as a guide until the desired point for cutting through the NGT is reached. The crank handle of the lithotriptor is turned until the NGT has been cut through. The truncated NGT is then easily retrieved, revealing a stitch that has also been cut through at its distal end.

References