

Transnasal endoscopic closure of persistent gastrocutaneous fistula via percutaneous suturing in altered oropharyngeal anatomy



A 65-year-old man with a past medical history of oropharyngeal squamous cell carcinoma, status post resection and flap reconstruction, presented with concern for gastrojejunostomy tube malfunction. During the patient's most recent gastrojejunostomy exchange, he was noted to have significant leakage around the tube. On physical examination, there was a 15-mm gastrocutaneous fistula visualized on the abdominal wall with an ulceration lateral to the tract. The gastrojejunostomy was removed at bedside in the hope of healing the ulceration and fistula. The aim of this procedure was to use percutaneous suturing under direct endoscopic visualization to close a large gastrocutaneous fistula. Owing to distorted oropharyngeal anatomy, a pediatric endoscope was introduced through the left naris (▶ **Video 1**). A large 15-mm gastrocutaneous fistula was noted in the gastric body. Brush and biopsy forceps were used to disrupt the tract to create granulation tissue. To close the defect, two 16-gauge angiocath needles were passed percutaneously through the abdominal wall into the stomach under direct endoscopic visualization on either side of the gastrocutaneous fistula. The needles were removed and a 2–0 monocryl suture was passed through one of the catheters from the outside. A micro biopsy forceps was passed through the other catheter and grasped the suture in the stomach under direct endoscopic visualization. The suture was then pulled through the abdominal wall with the forceps. Multiple surgical knots were tied on the cutaneous side to close the defect.

A similar approach to a persistent gastrocutaneous fistula was presented by Garcia et al. [1]. The suture was reinforced with an endoscopic suturing device,

which was not feasible in our case given the transnasal approach limiting endoscopic therapies. This case portrays a successful technique for closure of a gastrocutaneous fistula in a patient with altered oropharyngeal anatomy.

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Conflict of Interest

A. Singh is a consultant for Boston Scientific. I. Waxman is a consultant for Boston Scientific, Cook Medical, and Medtronic. C. G. Chapman is a consultant for Boston Scientific, Olympus, Medtronic, Steris Endoscopy, Abbvie, and Phathom Pharmaceuticals. N. A. Mehta is a consultant for Boston Scientific and Castle Biosciences. A. Maniak, K. Garg, and G. Kakked declare that they have no conflict of interest.

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▶ Video 1 Transnasal endoscopic closure of persistent gastrocutaneous fistula via percutaneous suturing in altered oropharyngeal anatomy.

Reference

- [1] Garcia R, Gomez Cifuentes JD, Aloor F et al. Closure of refractory gastrocutaneous fistula with endoscopically guided percutaneous suturing with the use of miniature biopsy forceps. *VideoGIE* 2023; 8: 260–262

Bibliography

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