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Treatment of gastrocutaneous fistula after percutaneous gastrostomy placement

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Persistent gastrocutaneous fistula after gastrostomy tube placement is a known adverse event, and techniques for fistula closure have limited efficacy. We demonstrate full-thickness suturing with endoscopic visualization of a persistent gastrocutaneous fistula by sequential angiocatheter placement to facilitate suture delivery and closure (Video). A 37-year-old woman underwent gastrostomy placement 2 years prior. Her course was complicated by peristomal leakage, ultimately prompting tube removal. A gastrocutaneous fistula persisted (Fig. 1A). To close the site, we first used a curette to disrupt the epithelial surface. Further disruption of the tract lining was achieved endoscopically using argon plasma coagulation (Fig. 1B). Angiocatheter placement through the abdominal wall into the gastric cavity was then performed, through which a suture was fed. A second angiocatheter was positioned on the opposite side of the fistula, facilitating entry of a mini biopsy forceps. These forceps were ultimately used to grasp and pull the suture through the abdominal wall toward the skin. This placement of interrupted sutures was repeated 3 times, ultimately leading to fistula closure (Fig. 1C). The patient's symptoms resolved within 1 month, and the fistula site remained closed. In conclusion, full-thickness suturing with endoscopic visualization, using angiocatheter placement to facilitate suture delivery, is a viable alternative for gastrocutaneous fistula closure.

Supplementary Material

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FIGURE 1.

Gastrostomy tube removal complicated by persistent gastrocutaneous fistula (**A**) treated with argon plasma coagulation for disruption of tract lining (**B**) followed by full-thickness suturing using angiocatheter placement to facilitate suture delivery with successful closure (**C**).