



[Gastrointest Endosc](#). Author manuscript; available in PMC 2017 Nov 1.

PMCID: PMC5134916

Published in final edited form as:

NIHMSID: NIHMS822640

[Gastrointest Endosc](#). 2016 Nov; 84(5): 851–852.

PMID: [27234052](#)

Published online 2016 May 24. doi: [10.1016/j.gie.2016.05.028](#)

## Treatment of gastrocutaneous fistula after percutaneous gastrostomy placement

Allison R. Schulman, MD,<sup>1</sup> Hiroyuki Aihara, MD, PhD,<sup>1,2</sup> and Christopher C. Thompson, MD, MSc, FACG, FASGE<sup>1,2</sup>

<sup>1</sup>Division of Gastroenterology, Hepatology and Endoscopy, Brigham and Women's Hospital, Boston, Massachusetts, USA

<sup>2</sup>Harvard Medical School, Boston, Massachusetts, USA

**Corresponding Author:** Christopher Thompson MD MSc FACG FASGE, Director of Therapeutic Endoscopy, Brigham and Women's Hospital, Division of Gastroenterology, Hepatology and Endoscopy, 75 Francis St., ASB II, Boston, MA 02115, [cthompson@hms.harvard.edu](mailto:cthompson@hms.harvard.edu), P: 617-525-8266, F: 617-264-6342, [cthompson@hms.harvard.edu](mailto:cthompson@hms.harvard.edu)

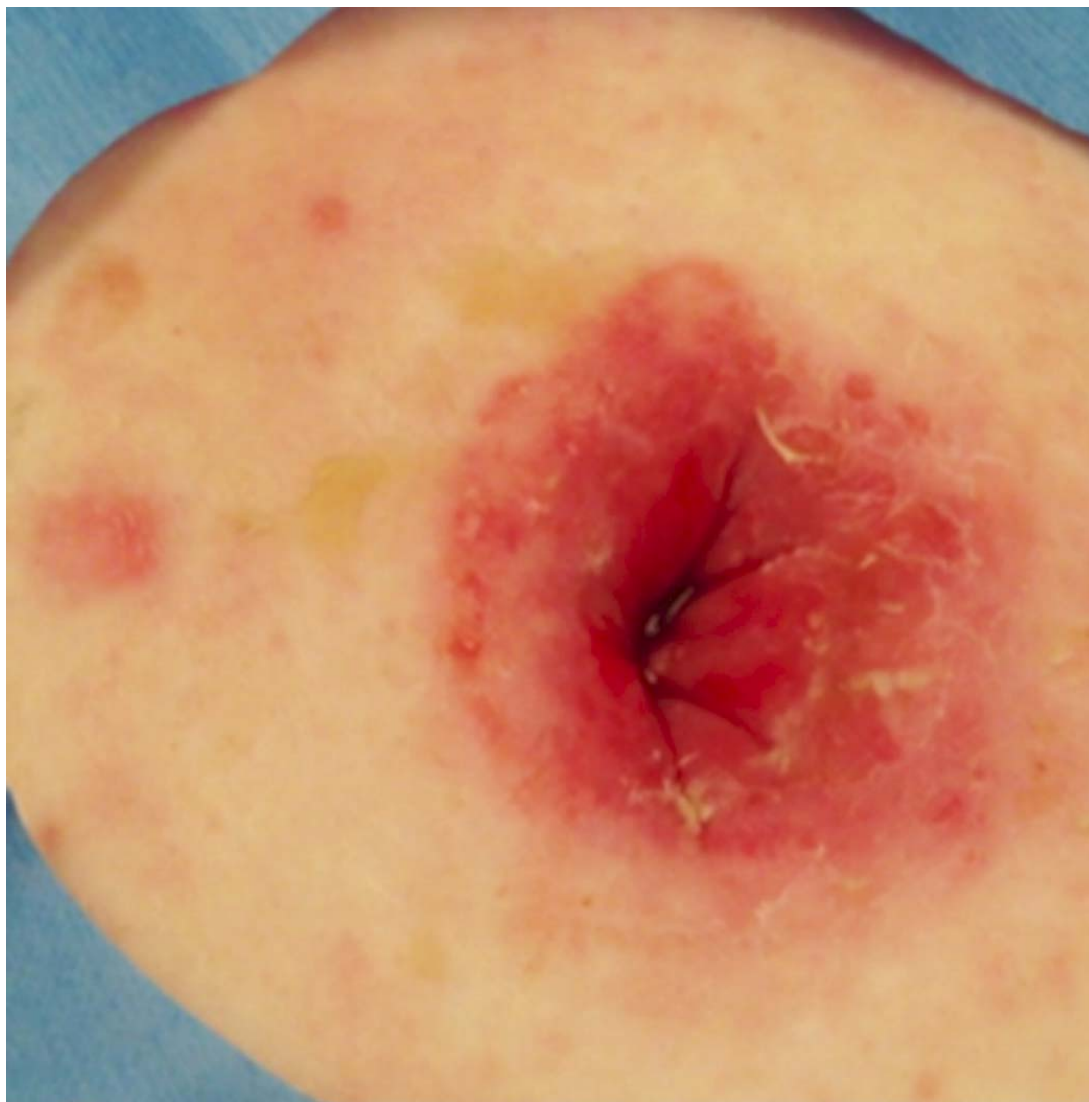
**Keywords:** Fistula, Endoscopy, Gastrostomy, Gastric fistula, Abdominal closure techniques

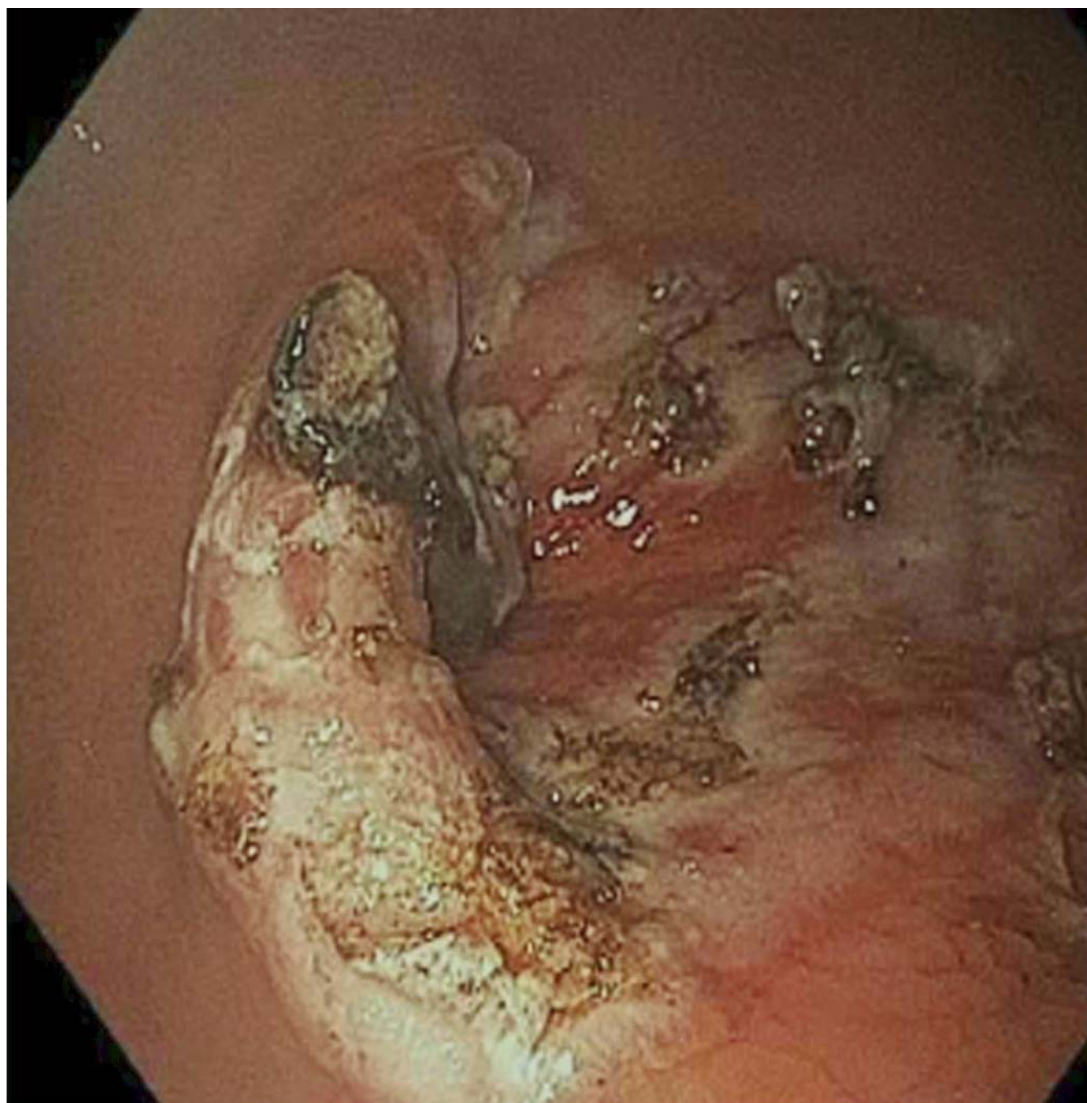
[Copyright notice](#)

[Publisher's Disclaimer](#)

The publisher's final edited version of this article is available at [Gastrointest Endosc](#)

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.







**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).

## Supplementary Material

[Go to:](#)

Treatment of gastrocutaneous fistula after percutaneous gastrostomy placement

[Click here to view.](#)<sup>(141M, mp4)</sup>

## Acknowledgments

[Go to:](#)

**Financial Disclosures:** A. Schulman has nothing to disclose. H. Aihara - Olympus (Consultant). CC Thompson –Olympus (Consultant/Research Support); Boston Scientific (Consultant); Covidien (Consultant, Royalty, Stock).

## Footnotes

[Go to:](#)

**Publisher's Disclaimer:** This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Drag to outliner or Upload  
Close