

## Title: Does it matter which plastic stents we use for the treatment of post-surgical leaks? Or does one-size-fit-all?

Authors:

Sergio A. Sánchez-Luna, Eduardo Guimãraes Hourneaux De Moura, Flaubert Sena de Medeiros, Diogo Turiani Hourneaux De Moura

DOI: 10.17235/reed.2021.8433/2021 Link: <u>PubMed (Epub ahead of print)</u>

Please cite this article as:

Sánchez-Luna Sergio A., Guimãraes Hourneaux De Moura Eduardo, Sena de Medeiros Flaubert, Turiani Hourneaux De Moura Diogo. Does it matter which plastic stents we use for the treatment of post-surgical leaks? Or does one-size-fit-all?. Rev Esp Enferm Dig 2021. doi: 10.17235/reed.2021.8433/2021.

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 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.



## CC 8433

Does it matter which plastic stents we use for the treatment of post-surgical leaks? Or does one-size-fit-all?

Sergio A. Sánchez-Luna<sup>1</sup>, Eduardo Guimãraes Hourneaux De Moura<sup>2</sup>, Flaubert Sena de Medeiros<sup>3</sup> and Diogo Turiani Hourneaux De Moura<sup>2</sup>

<sup>1</sup>Division of Gastroenterology and Hepatology. Department of Internal Medicine. Basil I. Hirschowitz Endoscopic Center of Excellence. The University of Alabama at Birmingham Heersink School of Medicine. Birmingham, Alabama. United States. <sup>2</sup>Endoscopy Unit. Gastrointestinal Department. Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo. São Paulo, Brazil. <sup>3</sup>Surgery Division. Federal University of Rio Grande do Norte. Natal, Brazil

**Correspondence:** Diogo Turiani Hourneaux De Moura e-mail: dthmoura@hotmail.com

Conflict of interest: SASL is the recipient of the 2021 American Society for Gastrointestinal Endoscopy (ASGE) Endoscopic Training Award by the ASGE and Fujifilm. EGHM is a consultant for Olympus and Boston Scientific.

Keywords: Post-surgical leaks. Endoscopic treatment. Plastic stents.

## Dear Editor,

We congratulate Fuentes-Valenzuela et al. (1) on their study entitled "Endoscopic internal drainage using transmural double-pigtail stents in leaks following upper gastrointestinal tract surgery." The authors report a technical and clinical success of 100 % and 77.8 %, respectively. Although double-pigtail stents (DPS) have been a mainstay in the treatment of leaks and post-surgical fluid collections, we would like to share our reservations with the type of DPS used.



There are several endoscopic approaches for the treatment of post-operative leaks (2,3) and the authors report using the Advanix<sup>™</sup> (Boston Scientific, MA, USA) and Visio<sup>®</sup> G. Flex (Belgium) stents. These stents, typically used for biliopancreatic indications, are hard, less flexible and can potentially cause tissue trauma leading to undesirable adverse events (AEs) such as the two events of mucosal erosion and tracheoesophageal fistula reported by the authors. In addition, bleeding and aneurism can also occur, although this was not reported in this series (4). In our experience, we have been using 7 FR double-pigtail ureteral stents due to AEs related to biliary plastic stents, with similar efficacy and a lower rate of adverse events. In two years of experience, we did not report any case of fistula or bleeding, although the rates of migration are similar to the conventional biliary stents. The ureteral pigtail stents are typically made from polyurethane and have the advantage of being much softer, more flexible and can be cut

accordingly to a desirable size as they are 24-26 cm in size. Also, they typically have less incrustation, good radiopacity and have clear markings to facilitate their placement (Fig. 1). These characteristics can diminish the risk of injury to nearby structures substantially.

With this in mind, we think that the use of the traditional biliary plastic stents should be avoided to prevent potentially undesirable AEs. We welcome the author's view on this controversial area.

## References

1. Fuentes-Valenzuela E, García-Alonso FJ, Tejedor-Tejada J, et al. Endoscopic internal drainage using transmural double-pigtail stents in leaks following upper gastrointestinal tract surgery. Rev Esp Enferm Dig 2020. E-pub ahead of print. PMID: 33371700. DOI: 10.17235/reed.2020.7514/2020

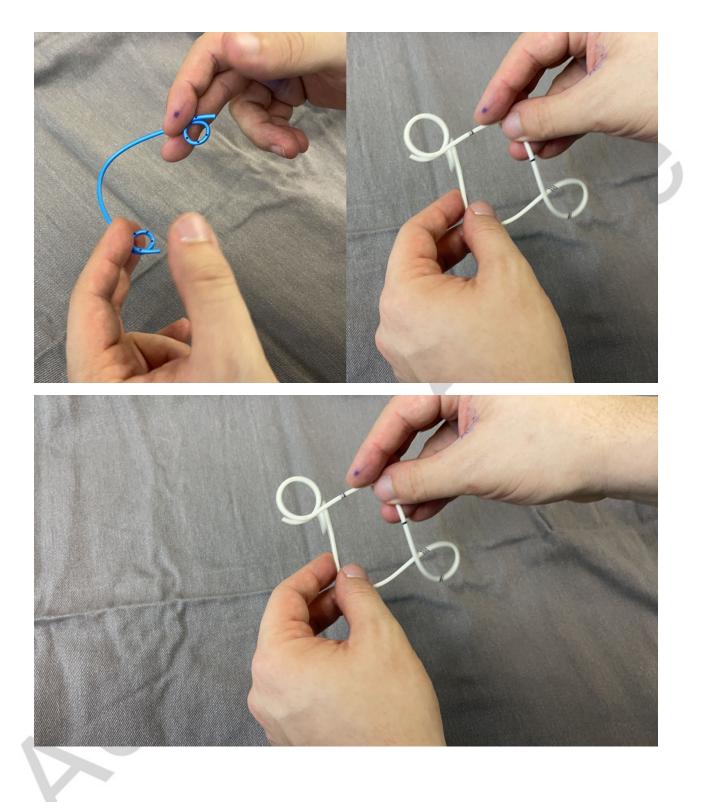
2. De Moura DTH, Sachdev AH, Thompson CC. Endoscopic full-thickness defects and closure techniques. Curr Treat Options Gastroenterol 2018;16(4):386-405. PMID: 30382572. PMCID: PMC6392034. DOI: 10.1007/s11938-018-0199-6

3. De Moura DTH, De Freitas Júnior JR, De Souza GMV, et al. Endoscopic management of acute leak after sleeve gastrectomy: principles and techniques. Endoscopy 2021. E-pub ahead of print. PMID: 34243196. DOI: 10.1055/a-1525-1661



4. Donatelli G, Spota A, Cereatti F, et al. Endoscopic internal drainage for the management of leak, fistula, and collection after sleeve gastrectomy: our experience in 617 consecutive patients. Surg Obes Relat Dis 2021;17(8):1432-9. PMID: 33931322. DOI: 10.1016/j.soard.2021.03.013







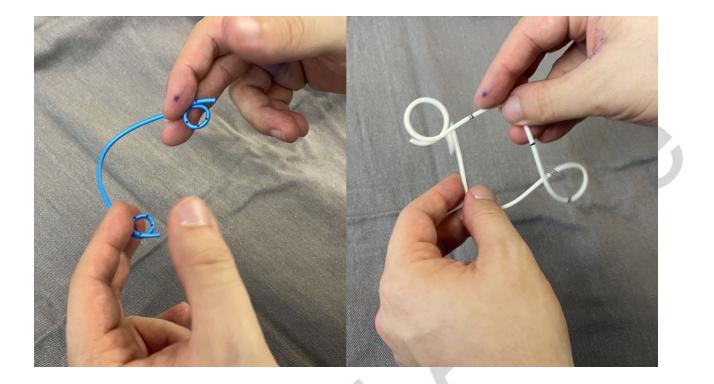


Fig. 1. Biliary pigtail stent (left) and ureteral pigtail stent (right).