



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Contents lists available at ScienceDirect

Surgery

journal homepage: www.elsevier.com/locate/surg

Positive aspects of self-expandable metallic stent endoscopic placement for malignant colorectal obstruction during the COVID-19 pandemic

Letter to the Editor:

Hidalgo-Pujol et al¹ showed that self-expanding metallic stent (SEMS) as a bridge to surgery might not lead to a negative impact on the long-term prognosis of the tumor compared with emergency colonic resection. We would like to add an important positive aspect of SEMS placement in this clinical setting during the COVID-19 pandemic.

The SEMS placement to relieve malignant colorectal obstruction presents the possibility to reduce contamination rates for patients and health workers. The procedure can be performed without tracheal intubation; the number of the involved health personnel is reduced; ICU is rarely required; and the hospital stay is shorter, which avoids the possibility of older patients entering a labyrinth of depression, which does not facilitate the postoperative course.

We compared the clinical outcomes of patients who had SEMS placement for malignant acute-subacute left colorectal obstruction during the pandemic period (January 2020–January 2022) and during the years 2018–2019. There was no mortality and no major morbidity after SEMS placement during the pandemic period. The results were similar to those obtained after SEMS procedures performed during the years 2018–2019, either by an overall point of view or using propensity score matching.

During the pandemic period the number of patients who received SEMS for malignant colorectal obstruction increased by 50% in comparison with the previous years (23 during 2020–2021; 12 during 2018–2019): in 15 patients with stage IV colorectal cancer SEMS represented a definitive form of treatment; in 8 patients the SEMS was a bridge to surgery, which was performed when the outbreak period ended. Fewer patients underwent emergency colorectal resection or end-colostomy for acute malignant left-sided colorectal obstruction in the pandemic period. While in the pre-pandemic period, surgeons decided for resection, end-colostomy, or SEMS placement on the basis of specific characteristics of the patients, SEMS represented the preferred form of treatment for all patients admitted with acute-subacute malignant colorectal obstruction during the outbreaks. Probably related to the preferential use of SEMS, the overall complications and operative mortality rates for patients admitted with acute left-sided colorectal obstruction in our hospital were significantly lower during

the pandemic period in comparison with the previous years (mortality 0 vs 5%; major morbidity 0 vs 10%).

At a mean follow-up of 6 months, one of the initially COVID-19 negative patients resulted positive with mild symptoms; none of the remaining 22 patients who had SEMS placement had symptoms or laboratory tests indicating COVID-19 infection. Among the 40 health professionals involved in endoscopic operative procedures, only 1 resident contracted the infection with moderate symptoms (2.5%). Among the 100 health professionals involved in surgery, 10 (10%) resulted positive for COVID-19 infection. Endoscopic SEMS placement can be performed without major risk for diffusion of the infection, provided specific isolation details are applied.^{2,3}

In regions with a high diffusion of the pandemic, we must accept compromises and to choose a treatment that has low short-term complication rates requires less organizational effort, with reduced possibilities of contamination and pulmonary complications, rather than a treatment that has been always considered more effective in the long term.^{4,5}

References

- Hidalgo-Pujol M, Biondo S, Die Trill J, et al. Upfront surgery versus self-expanding metallic stent as bridge to surgery in left-sided colonic cancer obstruction: a multicenter observational study. *Surgery*. 2022;172:74–82.
- Osorio J, Madrazo Z, Videla S, et al. Analysis of outcomes of emergency general and gastrointestinal surgery during the COVID-19 pandemic. *Br J Surg*. 2021;108:1438–1447.
- Lamazza A, Sterpetti AV, De Cesare A, Schillaci A, Antoniozzi A, Fiori E. Endoscopic placement of self-expanding stents in patients with symptomatic anastomotic leakage after colorectal resection for cancer: long-term results. *Endoscopy*. 2015;47:270–272.
- Lamazza A, Fiori E, Carati MV, Guzzo A, Pronio A, Sterpetti AV. Therapeutic options for emergency gastrointestinal malignancy in COVID19 pandemic: the role of operative endoscopy. *Br J Surg*. 2020;107:e403–e404.
- Sterpetti AV. COVID-19 diffusion capability is its worst, unpredictable characteristic: how to visit a patient from a distance. *Br J Surg*. 2020;107:e181.

Antonietta Lamazza, MD, Maria Vittoria Carati, MD, Anna Maria Pronio, MD, Enrico Fiori, MD, Angelo Antoniozzi, MD, Antonio V. Sterpetti, MD*
 Department of Surgery, University of Rome, Sapienza, Italy

* Corresponding author.

E-mail address: antonio.sterpetti@uniroma1.it (A.V. Sterpetti).

Accepted 30 June 2022