



**EDITORIAL**

## To Stent or Not to Stent in Colorectal Cancer: That is Still the Question in Gastroenterology!



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### Colocar ou Não Próteses no Cancro Colo-Rectal: Continua a ser a Questão em Gastroenterologia!

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Colorectal cancer is one of the most common cancers worldwide, and although there is growing concern about screening and prevention, 10–15% of the cases still present with obstruction.<sup>1</sup>

The management of these cases is difficult and there is ongoing debate about the best standard of care for these patients. Surgery is the traditional option but the use of self-expandable metal stents (SEMS) has been reported in malignant colonic obstruction, either for palliation or as a bridge-to-surgery in patients with potentially curable colon cancer.

The most recently published guidelines considered stents as the preferential treatment for palliation of obstructive colorectal cancer when feasible.<sup>1</sup> On the other hand, about the issue of stents as a bridge-to-surgery they recommended against the use of SEMS as a standard treatment, considering emergent surgery as the first therapeutic option. According to these guidelines, SEMS as a bridge to surgery would be reserved for those patients with higher risk of post-operative mortality (ASA  $\geq$ III and/or age >70 years).<sup>1</sup>

The rationale behind these recommendations comes mainly from three randomized controlled trials (RCT),

comparing SEMS as a bridge to surgery versus emergency surgery in patients with potentially curable left-sided obstructive colon cancer.<sup>2–4</sup> In these three RCTs, with small number of patients in the stent arms (15–26), the disease recurrence rates were higher in the SEMS groups and even higher in those patients who experienced tumor perforation. Although one meta-analysis<sup>5</sup> of seven RCTs comparing these two groups revealed lower overall morbidity, higher successful primary anastomosis rate and lower permanent stoma rate in the SEMS group; and none of the RCT showed differences in overall survival between the groups, the apparent oncological risks of SEMS made them unsuitable for first-line treatment when emergent surgery is an option.

But is real life practice comparable to a randomized controlled trial? How should we interpret these results and these recommendations? As recommendations, we would say. Because in real life scenarios we have to take several factors into account such as local availability and expertise for both techniques, costs, patients' preferences and comorbidities as well as questions related to quality of life.

In this issue of the journal, two groups of authors present the results of their retrospective analysis comparing the outcomes of SEMS as a bridge to surgery versus emergent surgery in large bowel malignant obstruction.

Ribeiro et al.<sup>6</sup> evaluated 42 patients with potentially curable colorectal cancer admitted with left-sided colonic obstruction who underwent the above mentioned procedures. Their objective was to compare the outcomes

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considering primary anastomosis and stoma rates, total hospital stay, overall survival and recurrence-free survival. They found no statistically significant differences in overall survival or recurrence-free survival between the groups, but a significant higher primary anastomosis rate (85.1% vs 20%) and lower stoma rate (25.7% vs 86.7%) in the SEMS group (27 patients).

Fernandes et al.<sup>7</sup> included patients with malignant colonic obstruction irrespective of the site of obstruction, and compared not only those two groups with curative intent (101 patients) but also two groups of palliative patients (71) submitted either to SEMS for palliation or to decompressive surgery. In the curative-intent groups they found statistically significant differences favoring the SEMS group: higher primary anastomosis rate (93.8% vs 76.4%), lower stoma rate (25.7% vs 54.9%) and lower overall mortality (31.3% vs 56.7%).

Interestingly, in the palliative groups, these authors did not find significant advantage of SEMS over decompressive surgery, because of longer hospital stay and reintervention rates, once again contradicting the guidelines. However, the group did not evaluate the aspects related to quality of life which could favor SEMS in this setting, as reported by Nagula et al.<sup>8</sup> and Young et al.<sup>9</sup> Moreover, the definition of clinical success was distinct from other studies that evaluated SEMS for palliation and this may have worsened their results.

These two observational studies resemble the real-life practice and despite the differences between them and the eventual weaknesses of retrospective analysis they both seem to support that maybe there is still a role for SEMS as a bridge to surgery in patients other than those with high risk for emergent surgery. Moreover, for palliation the observational study of Fernandes et al.<sup>7</sup> suggests that colostomy may have advantages over stents.

Taken altogether it really looks that these recent guidelines are not the end of the story concerning the role of stents in colorectal cancer. Science is a constantly work-in-progress and in this matter more studies are needed to clarify these controversies, certainly taking into account the

aspects related to patients' quality of life and comorbidities in order to help us make better decisions for our patients.

## References

- van Hooft JE, van Halsema EE, Vanbiervliet G, Beets-Tan RG, DeWitt JM, Donnellan F, et al. Self-expandable metal stents for obstructing colonic and extracolonic cancer: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline. *Endoscopy*. 2014;46:990–1053.
- Tung KL, Cheung HY, Ng LW, Chung CC, Li MK. Endo-laparoscopic approach versus conventional open surgery in the treatment of obstructing left-sided colon cancer: long-term follow-up of a randomized trial. *Asian J Endosc Surg*. 2013;6:78–81.
- Alcántara M, Serra-Aracil X, Falcó J, Mora L, Bombardó J, Navarro S. Prospective, controlled, randomized study of intraoperative colonic lavage versus stent placement in obstructive left-sided colonic cancer. *World J Surg*. 2011;35:1904–10.
- Sloothaak DA, van den Berg MW, Dijkgraaf MG, Fockens P, Tanis PJ, van Hooft JE, et al. Oncological outcome of malignant colonic obstruction in the Dutch Stent-In 2 trial. *Br J Surg*. 2014;101:1751–7.
- Huang X, Lv B, Zhang S, Meng L. Preoperative colonic stents versus emergency surgery for acute left-sided malignant colonic obstruction: a meta-analysis. *J Gastrointest Surg*. 2014;18:584–91.
- Ribeiro I, Pinho P, Leite M, Proença L, Silva J, Ponte A. Reevaluation of self-expanding metallic stents as a bridge to surgery for malignant left-sided colonic obstruction – 6 years experience. *GE Port J Gastroenterol*. 2016;23:76–83.
- Fernandes D, Domingues S, Moreira Gonçalves B, Bastos P, Ferreira A, Rodrigues A, et al. Acute treatment of malignant colorectal occlusion – real life practice. *GE Port J Gastroenterol*. 2016;23:66–75.
- Nagula S, Ishill N, Nash C, Markowitz AJ, Schattner MA, Temple L, et al. Quality of life and symptom control after stent placement or surgical palliation of malignant colorectal obstruction. *J Am Coll Surg*. 2010;210:45–53.
- Young CJ, De-Loyde KJ, Young JM, Solomon MJ, Chew EH, Byrne CM, et al. Improving quality of life for people with incurable large-bowel obstruction: randomized control trial of colonic stent insertion. *Dis Colon Rectum*. 2015;58:838–49.