Editorial

Complete mesocolic excision for colon cancer: a surgical dilemma

Emilio Bertani

Department of Digestive Surgery, European Institute of Oncology, Via Ripamonti, Milan, Italy

Correspondence to: Emilio Bertani. Department of Digestive Surgery, European Institute of Oncology, Via Ripamonti, 435-20141 Milan, Italy.
Email: emilio.bertani@ieo.it.

Comment on: Zheng M, Ma J, Fingerhut A, *et al.* Complete mesocolic excision for colonic cancer: Society for Translational Medicine expert consensus statement. Ann Laparosc Endosc Surg 2018;3:68.

Received: 12 January 2019; Accepted: 30 January 2019; Published: 31 January 2019.
doi: 10.21037/ales.2019.01.13
View this article at: http://dx.doi.org/10.21037/ales.2019.01.13

In the recent years the concept of complete mesocolic excision (CME) with central vascular ligation (CVL) in colon cancer surgery was put beside that of total mesorectal excision in rectal cancer (1,2). However, it is not widely accepted since a little of confusion exists regarding the definition of CME, there are many technical aspects that vary among the reported series, and there are no solid data regarding its benefit on overall survival and local recurrence rates. The first thing we should determine is the end point for measuring the usefulness of CME. The concept of TME had an enormous spread and strong affirmation because of the dramatic reduction of local recurrence rate after surgery for rectal cancer. This was partly due because of the high number of events (local recurrences) for the old-style non-TME rectal surgery. Moreover, this result was pushed forward further by chemo-radiotherapy regimens. Are we willing to have our local recurrences after right colectomies significantly lowered on a large scale after CME? In the article by Zheng *et al.* (3) the panel expressed an enthusiastic view of the potential advantages of CME. I think we should be very careful. Right colectomy is a very common procedure and CME is a technically demanding technique. CME in expert hands proved to be a safe procedure (4). However, we know very little on the learning curve and promising results have been reported also for laparoscopic and robotic CME (5). Another issue is the relationship between CME and extended lymphadenectomy: although there are no randomized studies on this topic, right colectomy with CME is reported to be associated with higher lymph-node retrieval for UICC stage II and III (6). In this respect it is unclear whether the Will Rogers phenomenon and the stage migration effect may play a role in that setting. However, better oncologic results of CME for colon cancer, seem not to belong on an extended lymphadenectomy (7).

Data from the Danish registry published on *British Journal of Surgery* reported a higher morbidity after CME (8). The routine adoption of CME in particular during right colectomy is not indicated according to panelists mainly for this reason. Beside of wonderful videos of CME performed by expert hands that are available on the web, this practice at present time should be limited to high-volume centers and tutoring programs should be implemented only if results of ongoing studies will show superiority of CME in terms of long-term outcome of patients.

Acknowledgments

Funding: None.

Footnote

Provenance and Peer Review: This article was commissioned by the editorial office, *Annals of Laparoscopic and Endoscopic Surgery*. The article did not undergo external peer review.

Conflicts of Interest: The author has completed the ICMJE uniform disclosure form (available at http://dx.doi.org/10.21037/ales.2019.01.13). The author has no conflicts of interest to declare.

Ethical Statement: The author is accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are

appropriately investigated and resolved.

References

1. Gouvas N, Pechlivanides G, Zervakis N, et al. Complete mesocolic excision in colon cancer surgery: a comparison between open and laparoscopic approach. Colorectal Dis 2012;14:1357-64.
2. Hohenberger W, Weber K, Matzel K, et al. Standardized surgery for colonic cancer: complete mesocolic excision and central ligation--technical notes and outcome. Colorectal Dis 2009;11:354-64; discussion 64-5.
3. Zheng M, Ma J, Fingerhut A, et al. Complete mesocolic excision for colonic cancer: Society for Translational Medicine expert consensus statement. Ann Laparosc Endosc Surg 2018;3:68.
4. Bernhoff R, Sjövall A, Buchli C, et al. Complete mesocolic excision in right-sided colon cancer does not increase severe short-term postoperative adverse events. Colorectal Dis 2018;20:383-9.
5. Spinoglio G, Bianchi PP, Marano A, et al. Robotic Versus Laparoscopic Right Colectomy with Complete Mesocolic Excision for the Treatment of Colon Cancer: Perioperative Outcomes and 5-Year Survival in a Consecutive Series of 202 Patients. Ann Surg Oncol 2018;25:3580-6.
6. Zurleni T, Cassiano A, Gjoni E, et al. Correction to: Surgical and oncological outcomes after complete mesocolic excision in right-sided colon cancer compared with conventional surgery: a retrospective, single-institution study. Int J Colorectal Dis 2018;33:113-4.
7. Bertelsen CA, Kirkegaard-Klitbo A, Nielsen M, et al. Pattern of Colon Cancer Lymph Node Metastases in Patients Undergoing Central Mesocolic Lymph Node Excision: A Systematic Review. Dis Colon Rectum 2016;59:1209-21.
8. Bertelsen CA, Neuenschwander AU, Jansen JE, et al. Short-term outcomes after complete mesocolic excision compared with 'conventional' colonic cancer surgery. Br J Surg 2016;103:581-9.

doi: 10.21037/ales.2019.01.13
Cite this article as: Bertani E. Complete mesocolic excision for colon cancer: a surgical dilemma. Ann Laparosc Endosc Surg 2019;4:16.