Letter to the Editor

Fluorescence angiography during transanal total mesorectal excision: steps to a safer anastomosis

Steven D. Wexner

Department of Colorectal Surgery, Cleveland Clinic Florida, Weston, FL, USA

Correspondence to: Steven D. Wexner, MD, PhD (Hon). Department of Colorectal Surgery, Cleveland Clinic Florida, 2950 Cleveland Clinic Blvd, Weston, FL 33331, USA. Email: wexners@ccf.org.

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We thank Dr. Baldari and colleagues for having commented upon our article on fluorescence angiography during transanal total mesorectal excision. We agree with their statement that "anastomotic leakage is a multifactorial complication". Towards that end, one of the senior authors (SD Wexner) routinely mobilizes the splenic flexure and both senior authors (SD Wexner and AM Lacy) routinely perform high ligation of the inferior mesenteric artery and vein. Both senior authors routinely intracorporeally divide the mesentery from the pedicle of the inferior mesenteric vessels to the sigmoid descending colonic junction. In addition, both senior authors routinely air test the anastomosis and, in the case of a hand-sewn anastomosis perform a "reverse" leak test (1). Direct endoscopic visualization of the anastomosis is always a part of every operation. We also agree with the statement of Baldari and coauthors that "*adequate blood supply is one of the main factors in anastomotic healing*". For that reason, both senior authors routinely employ indocyanine green fluorescence angiography for all high risk left sided colorectal and coloanal anastomoses (2-5).

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Footnote

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References

1. Emile SH, Wexner, SD. The Reverse Leak Test for the Assessment of Low Coloanal Anastomosis: Technical Note. Tech Coloproctol 2019. (In press).
2. Vallance A, Wexner S, Berho M, et al. A collaborative review of the current concepts and challenges of anastomotic leaks in colorectal surgery. Colorectal Dis 2017;19:O1-12.

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3. Chadi SA, Fingerhut A, Berho M, et al. Emerging Trends in the Etiology, Prevention, and Treatment of Gastrointestinal Anastomotic Leakage. J Gastrointest Surg 2016;20:2035-51.
4. Mizrahi I, de Lacy FB, Abu-Gazala M, et al. Transanal total mesorectal excision for rectal cancer with indocyanine green fluorescence angiography. Tech Coloproctol 2018;22:785-91.
5. Mizrahi I, Abu-Gazala M, Rickles AS, et al. Indocyanine green fluorescence angiography during low anterior resection for low rectal cancer: results of a comparative cohort study. Tech Coloproctol 2018;22:535-40.

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