Achievement of haemostasis following a double-stapled (Knight–Griffen) anastomosis using the transanal endoscopic

the procedure consisted of freshening the margin of the fistula (Video S1). Following this, a continuous sutured closure was performed with a resorbable self-locking monofilament suture. Finally, a second layer was used to reinforce the repair using another monofilament, slowly resorbable, suture. After 6 months there has been no recurrence of the fistula.

Postoperative rectovaginal fistulas may be a complication of surgery for rectal cancer and, if they do occur, may be further complicated if preoperative radiotherapy has been employed. An individualized approach may be necessary to achieve successful closure. The TEO system can be a valuable aid but must be used by experienced surgeons.

Conflict of interests

There are no conflicts of interest to declare.

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Supporting Information

The video may be found in the online version of this article and also on the Colorectal Disease Journal YouTube and Vimeo channels:

Video S1. Treatment of rectovaginal postanastomotic fistula with a transanal endoscopic operation.

Achievement of haemostasis following a double-stapled (Knight–Griffen) anastomosis using the transanal endoscopic operating system – a video vignette

doi:10.1111/codi.14896

Dear Editor,

Postoperative colorectal anastomotic bleeding is not uncommon following colonic surgery. Endoscopic procedures are usually safe, efficient and successful. The use of endoscopic clips or direct injection of sclerosing agents guarantees accurate haemostasis. Endoscopic electrocoagulation may also be used to deal with anastomotic haemorrhage [1–5].

We present a case of a patient undergoing a sigmoid colectomy for diverticulosis. On the first postoperative day, bleeding occurred from the double-stapled (Knight–Griffen) anastomosis. Initial management was with endoscopic clips but further bleeding occurred after 12 h.

At this stage, we decided to use the transanal endoscopic operating (TEO) system. With the patient in the supine position, the bleeding point was identified and a continuous suture used to under-run the area in question, using a resorbable self-locking monofilament suture. This was successful with no recurrent bleeding.

The TEO system can be an additional valuable aid but must be used by experienced surgeons.

Conflicts of interest

There are no conflicts of interest to declare.

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Supporting Information

The video may be found in the online version of this article and also on the Colorectal Disease Journal YouTube and Vimeo channels:

Video S1. Achievement of haemostasis following a double-stapled (Knight–Griffen) anastomosis using the transanal endoscopic operating system.

Venous congestion and near-infrared perfusion angiography in colorectal surgery – a video vignette

doi:10.1111/codi.14897

Dear Editor,

Arterial inflow insufficiency is a well-recognized threat to a colorectal anastomosis. Venous congestion is less well described but can also jeopardize healing. While there has been some work defining its importance for upper gastrointestinal anastomosis [1], and some authors have tried to factor in its presence as a risk factor for postoperative recovery following anterior resection [2], abnormalities of segmental outflow can be difficult to recognize and react to intra-operatively.

Although fluorescence angiography using near-infrared (NIR) laparoscopy with systemic indocyanine green (ICG) administration is becoming increasingly commonplace as an intra-operative decision-support measure, it does not completely eliminate anastomotic complications [3]. Some experts have already pointed to a potential limitation in its use in that the presence of ICG alone in a segment of bowel is not sufficient in itself to indicate adequate perfusion [4]. Dynamic inflow is important for one to be fully confident of normal perfusion kinetics, although this can be difficult for the human observer as it requires one to notice a rapid change in signalling within the region of interest compared with another area of normal control elsewhere on the same screen. This may also explain how misinterpretation of the signal can potentially occur and so underlie why some fluorescent anastomoses still leak postoperatively. While change in the microbiome can be another factor contributing to complications in convalescence, commensal bacteria are phenotypically switch-activated by tissue injury, including any bowel with impaired perfusion remaining after surgery [5]. Correct control of arterial and venous perfusion is therefore a necessary standard to allow proper assessment and identification of the contribution of the microbiome *in vivo*.

In this video (Video S1 in the online Supporting Information), we show the occurrence and intra-operative correction of venous ischaemia during a laparoscopic anterior resection in a man with sigmoid cancer that was confirmed by postoperative histology. We demonstrate the hallmark characteristics of this phenomenon as seen in both white light and NIR laparoscopy (in short, regarding the NIR signal there is slow and patchy ICG inflow initially with unusual signal persistence in the affected segment following clearance from adjacent unaffected intestine). These subtle signs indicate why a reliable means of quantitative objective dynamic measurement is required to get the most out of interpretative technology. With specific respect to NIR–ICG, computer vision analytics including, potentially, machine learning-supported decision-nudging may usefully provide this in conjunction with existing hardware surgical imaging platforms [6].

Conflicts of interest

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