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Laparoscopic redo coloanal anastomosis for rectovaginal fistula following transanal total mesorectal excision – a video vignette

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Dear Sir,

Rectovaginal fistula (RVF) can occur as a postoperative complication, typically following sphincter-preserving rectal resection [1]. Although some studies have reported colostomy, fistulectomy, suture closure, pull-through, and redo anastomosis for treatment in such cases, an optimal strategy remains controversial due to high failure rates [2-5]. To achieve successful outcome, several factors needs to be taken into account including the size, location, and etiology of the RVF [6].

A 58-year-old woman was referred to our hospital for treatment of a postoperative RVF that had persisted for more than 1 year following transanal intersphincteric resection at another hospital. As the symptom of RVF, vaginal fecal discharge presented. The RVF was identified 4 cm from the anal verge. Intraoperative vaginal injury was considered a cause of RVF. We initially performed transvaginal local repair with closure of the rectal and vaginal defects; however, the RVF relapsed 3 months later. Therefore, we performed laparoscopic redo anastomosis to treat the RVF.

Under direct vision, we performed intersphincteric dissection transanally approximately 2 cm below the RVF. Thereafter, we switched to a laparoscopic approach and dissected the anastomosed colon down to the pelvic floor. Using a two-team approach, we completed successful resection of the anastomosed colon concomitant with the vaginal posterior wall. After closure of the vaginal wall by interrupted sutures, a pedicled omental flap was interposed between the vagina and re-anastomosed colon to reinforce the closure site. Adding the splenic flexure mobilization and division of the Riolan's arcade, we performed hand-sewn redo coloanal anastomosis.

The total operation time was 560 min, and the intraoperative blood loss was 90 mL. The postoperative course was uneventful. At 6-months postoperative follow-up, no recurrence of the RVF was observed. Although some studies reported that redo coloanal anastomosis is acceptable for morbidity and function [7], the patient's functional outcomes and quality of life require follow-up. Herein, we present the first report of successful treatment of postoperative RVF following taTME surgery for rectal cancer.

Conflicts of interests

Drs. Keita Hanada, Kenji Kawada, Tomoaki Okada, Koji Yamanoi, Masaki Mandai, and Kazutaka Obama have no conflicts of interest or financial ties to disclose.

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