How to reduce anterior resection syndrome and post-operative complication after rectosigmoid resection

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SUMMARY

Intestinal surgery is often required in the management of patients with gynecological malignancies, and the rectosigmoid colon is the bowel segment most frequently involved.[1 2]

In rectal cancer, the total mesorectal excision technique represents the standard procedure for surgical excision. However, since its introduction, the risk of anastomotic leakage and pelvic infection has increased. Moreover, total mesorectal excision is associated with pelvic and rectal autonomic nerve injury, which may cause 'anterior resection syndrome' (defined as disordered bowel function after rectal resection), leading to a detriment in quality of life.[3]

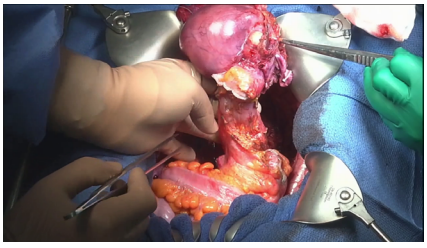
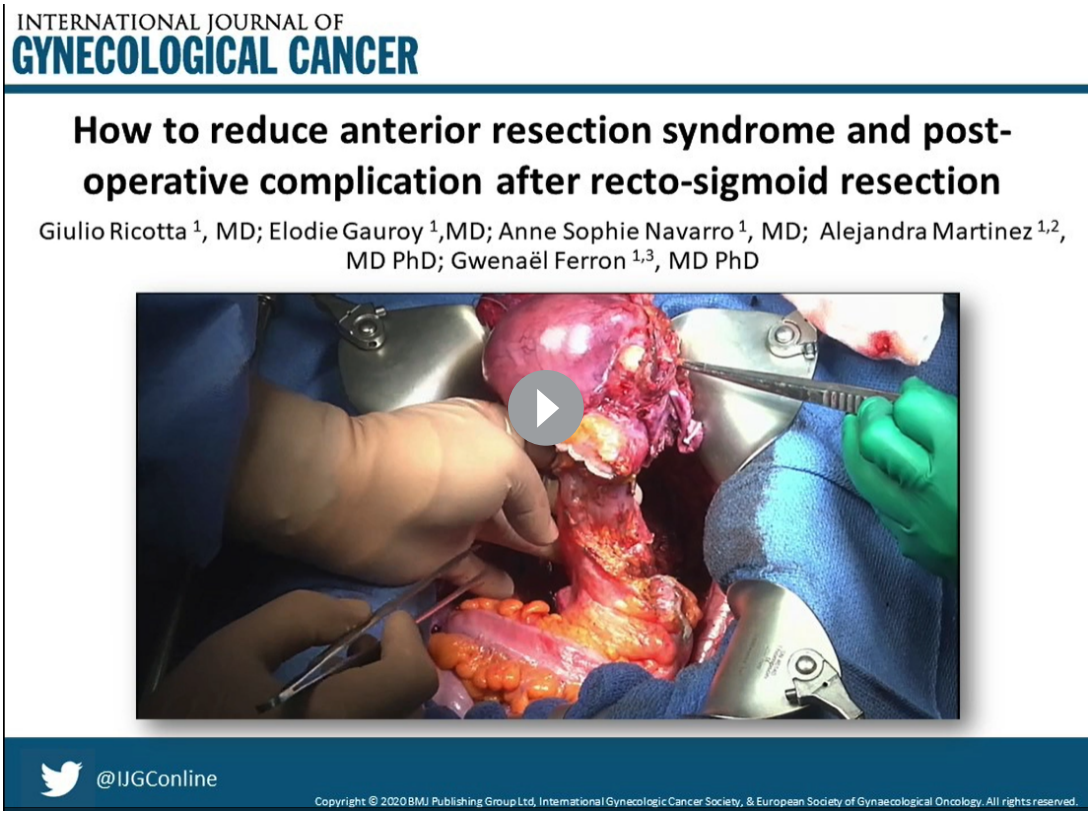


Figure 1 Photo showing the close rectal dissection

In gynecological malignancy, in cases where there is no deep macroscopic mesorectal disease, total mesorectal excision is not essential. Close rectal dissection technique is based on mesorectal



Video 1 Close rectal dissection technique

sparing, and allows the preservation of the superior rectal artery while minimizing autonomic nerve damage.

In a review evaluating these two different surgical procedures in rectal benign disease, close rectal dissection was associated with reduced nerve injury and pelvic sepsis, with a lower rate of anastomotic leakage and improved bowel function.[4] These results were confirmed by Son et al in a retrospective study on patients with ovarian cancer, which showed no differences in oncologic outcomes.[2]

In this video, we present an anterior pelvic exenteration associated with a rectosigmoid resection with the close rectal dissection technique in a woman aged in her 50s, who had been treated with definitive chemoradiotherapy and brachytherapy for locally advanced cervical cancer. Ten months after the end of treatment, the patient locally recurred, and an anterior pelvic exenteration (type I Magrina) with a rectosigmoid resection with close rectal dissection was performed.

We describe the procedure of rectosigmoid resection with the close rectal dissection technique. To summarize, rectosigmoid resection is often necessary to achieve complete cytoreduction in gynecological malignancies. In cases of no macroscopic deep mesorectal localization of disease and without massive Douglas pouch involvement, total mesorectal excision is unnecessary. Close rectal dissection allows better anastomotic vascularization by preserving the superior rectal artery and reducing nerve injury, with a lower rate of anastomotic leakage, pelvic sepsis, and improved bowel function. Unfortunately, this surgical technique is not widely applied by surgeons, even when technically feasible. With this video, we aim to standardize its use (Video 1).

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