Resection of recto-vaginal deep infiltrating endometriosis nodules: an innovative laparoscopic technique – a video vignette

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Dear Editor,

The surgical resection of recto-vaginal deep infiltrating endometriosis nodules (RVDIEN) is challenging. It is the only treatment leading to long-term symptomatic improvement [1]. This video vignette aims to report an innovative technique of minimally invasive resection of RVDIEN.

Our laparoscopic approach systematically starts with the dissection of the perirectal fascia [2] in order to extensively mobilize the posterior part of the rectum. The dissection continues laterally beyond the fibrosis caused by the RVDIEN. Finally, the rectum together with the RVDIEN *en bloc* is separated from the posterior vaginal cul-de-sac in order to perform a facilitated rectal shaving [3] far from the deep pelvis, or a colorectal resection.

We included 10 consecutive patients in a preliminary analysis. Four had a colorectal resection and six had rectal shaving. The median operating time was 133 min: 192 min (107–261) for the colorectal resection and 119 min (76–177) for the rectal shaving (P=0.2). The pain and the constipation significantly improved after a median follow-up of 4 (2–11) months. The median Endometriosis Health Profile – 5 scores [4] were 24 (3–31) before and 1 (0–25) after surgery (P=0.018). We registered no recto-vaginal fistula. Two major post-operative complications occurred: one uretero-vaginal fistula and one faecal incontinence. After a median follow-up of 22.5 (14–36) months, we observed no recurrence.

This innovative technique appears, in our preliminary experience, to allow complete resection of RVDIEN, leading to a significant improvement of patients' symptoms and quality of life after surgery.

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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. Recto-vaginal deep infiltrating endometriosis nodules: an innovative laparoscopic technique.

Medrobotics Flex transanal excision of a rectal gastrointestinal stromal tumour: first video of the transanal Flex robot used in a human – a video vignette

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Dear Editor,

The traditional Flex Robotic System, utilized for head and neck surgery, is not a sealed system and cannot maintain insufflation [1–3]. The Flex Colorectal Drive Robotic System has been adapted to maintain insufflation for transanal visualization and access to the mid and upper rectum using articulating instruments with tactile feedback. This is the first video of the use of the new transanal Flex Robotic System in a human(Video S1). The robot takes a nonlinear path to the target lesion, throughout which it is able to deploy compatible Flex instruments to facilitate dissection. This video shows the safety and feasibility of this novel transanal platform.

The patient was a 56-year-old woman with a 14×11 mm submucosal mass. Preoperative fine needle aspiration was inconclusive, and ultrasound demonstrated a hypoechoic submucosal anterior mass suggestive of a gastrointestinal stromal tumour (GIST).

The mass was 13 cm from the anal verge after pneumorectum was achieved to 15 mmHg via the Airseal system. The mucosa was scored circumferentially around the lesion for margins and the mass was excised in a full-thickness distal-to-proximal fashion using monopolar cautery. Margins were taken at the deep, distal, left lateral, proximal and right lateral aspects and the defect was closed transversely using 2-0 V-lock PDS Suture on an SH needle. Postprocedure flexible sigmoidoscopy ensured no stenosis from the repair. The patient was