

# Laparoscopic Anterior Resection with Transvaginal Specimen Extraction (TVSE) for Colorectal Cancer and Concomitant Total Hysterectomy and Bilateral Salpingo-Oophorectomy (THBSO): A Technical Description

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## ABSTRACT

**Background.** Natural orifice specimen extraction (NOSE) has evolved to circumvent the need for a specimen extraction site. Transvaginal specimen extraction (TVSE) for colorectal disease has been shown to be safe and feasible in selected cases.<sup>1,2</sup> We describe our technique of TVSE in a case of laparoscopic ultra-low anterior resection (ULAR) with defunctioning ileostomy (DI) with a concomitant total hysterectomy and bilateral salpingo-oophorectomy (THBSO).

**Methods and Results.** A 74-year-old Chinese female was diagnosed with a mid-rectal cancer following colonoscopic evaluation for a change in bowel habits. Preoperative magnetic resonance imaging (MRI) suggested T2N0 disease and the patient was recommended for upfront surgery following multidisciplinary discussion. Computed tomography (CT) scan confirmed a 4.3 × 3.4 cm right adnexal cystic lesion, without enhancing septations or soft tissue component. No metastatic disease was identified. The patient underwent a

laparoscopic ULAR with DI and THBSO with TVSE; operative time was 469 min. The specimen showed a 2.5 cm mid-rectal tumour. Histology revealed a pT3N1a moderately differentiated adenocarcinoma of the mid rectum, with 1 of 20 lymph nodes involved by metastatic carcinoma. The quality of the total mesorectal excision (TME) was good, with no breach in the mesorectal fascia. The distal and radial margins were 1.5 and 3.0 cm, respectively. The patient recovered well postoperatively, with minimal wound site pain, and was discharged well on postoperative day 5.

**Conclusion.** TVSE is oncologically safe and feasible in certain malignant colorectal pathologies. It is an option to consider in selected cases that require a concomitant gynecological procedure.

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