Pushing the Limits of Local Excision for Rectal Cancer: Transanal Minimally Invasive Surgery for an Upper Rectal/Rectosigmoid Lesion

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ABSTRACT

Background. Transanal minimally invasive surgery (TAMIS) is an evolving technique for the local excision of early rectal cancers,¹ particularly for mid-rectal lesions. The approach to upper rectal lesions is significantly more challenging and prone to complications. We demonstrate TAMIS for an upper rectal/rectosigmoid lesion, with transanal repair of an intraoperative rectal/rectosigmoid perforation.

Methods. The patient is an elderly male in whom colonoscopy demonstrated a large polypoid lesion of the upper rectum/rectosigmoid colon. On rigid proctoscopy, the lesion was 4 cm in size and occupied 40 % of the rectal circumference, with distal extent at 14 cm from the anal verge. Endoscopic ultrasound was consistent with T_{is}N₀ disease. Multiple attempts at endoscopic mucosal resection were unsuccessful and the patient refused radical resection. The patient underwent TAMIS with a disposable transanal access port, using our previously published stepwise technique.²

Results. The patient successfully underwent TAMIS. Intraoperatively, a small full-thickness perforation was created proximal to the excision site and was primarily

repaired. A stepwise approach to excision and repair is described. Postoperatively, the patient had low-grade fevers for which he was treated empirically with antibiotics. The fevers resolved without further intervention. Pathologic examination revealed a 3.5 cm villous adenoma with focal high-grade dysplasia, negative margins, and two negative lymph nodes. On outpatient follow-up, the patient was symptom-free and had no fevers, pain, bleeding, fecal incontinence, or genitourinary functional deficits. He is disease-free 10 months from his procedure.

Conclusions. TAMIS of upper rectal lesions is technically challenging, but can be accomplished safely in well-selected patients.

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Electronic supplementary material The online version of this article (doi:10.1245/s10434-013-3457-9) contains supplementary material, which is available to authorized users.

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First Received: 28 October 2013;
Published Online: 10 January 2014

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