

**Title:**

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## Endoscopic transmural resection as an alternative to colorectal surgery after high-risk (non-curative) endoscopic resection

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Dear Editor,

Endoscopic full-thickness resection (eFTR) is an emerging technique that enables effective and safe management of complex colorectal lesions. The full-thickness resection device (FTRD<sup>®</sup>, Ovesco, Germany) has primarily been used for non-exposed transmural resection of challenging subepithelial or epithelial lesions, where conventional methods may be limited. This technique represents an alternative to surgery in selected patients, and its applications are rapidly expanding. In recent years, eFTR has been described as an alternative to surgery for scars aiming to exclude residual tumors after non-curative endoscopic resection.

We present a case of a 41-year-old woman with Lynch syndrome (*dMLH1*) with rectal adenocarcinoma at the age of 20 underwent anterior resection of the rectum and adjuvant chemoradiotherapy. At the age of 39, during endoscopic surveillance, she presented with a

suspicious lesion (Paris 0-Is+IIa, NICE2, JNET2B) measuring 16mm in the hepatic angle, and underwent *en bloc* endoscopic mucosal resection (EMR). Histopathological analysis revealed a low-grade invasive adenocarcinoma with lymphoid stroma with deep invasion of the submucosa and resection margin involvement (vertical R1). After a multidisciplinary team discussion, complementary surgery was proposed but the patient refused, opting for close endoscopic and imaging surveillance. Two subsequent colonoscopies plus computed tomography (CT) scans showed no signs of macro or microscopic residual or recurrent tumor, even after extensive biopsies of the colonic scar. However, a CT scan 20months post-resection showed a *de novo* 2cm thickening of the parietal wall in the hepatic angle, consistent with the location of the previous endoscopic resection. Suspecting deep parietal tumor recurrence without superficial endoscopic findings, a transmural endoscopic resection using FTRD<sup>®</sup> of the EMR scar was performed, whose histology revealed no transparietal tumor recurrence.

Management of patients after high-risk noncurative resection of T1 colorectal carcinoma should include comprehensive staging and consideration of additional non-endoscopic therapies (surgery and/or chemoradiotherapy), in accordance with the most recent ESGE guidelines. In this case, surgery was deemed the best option, but the patient declined. Suspicion of intraparietal recurrence on CT scan prompted consideration of eFTR to exclude recurrent tumor.

The authors suggest that transmural evaluation of the scar after noncurative endoscopic resection of T1 colorectal cancer, whether for excluding residual tumor or during surveillance to exclude recurrence, represents a promising indication for eFTR. This technique has demonstrated to be a safe and effective therapeutic alternative, avoiding surgery and its associated morbidity and mortality. However, the precise indications and the timing of this approach need to be further elucidated.

## **Statements**

### **Statement of Ethics**

The study protocol was reviewed and approved by our institution's Ethics Committee (125.2024).

Written informed consent was obtained from the patient.

### **Conflict of Interest Statement**

The authors report no conflict of interest.

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### **Author Contributions**

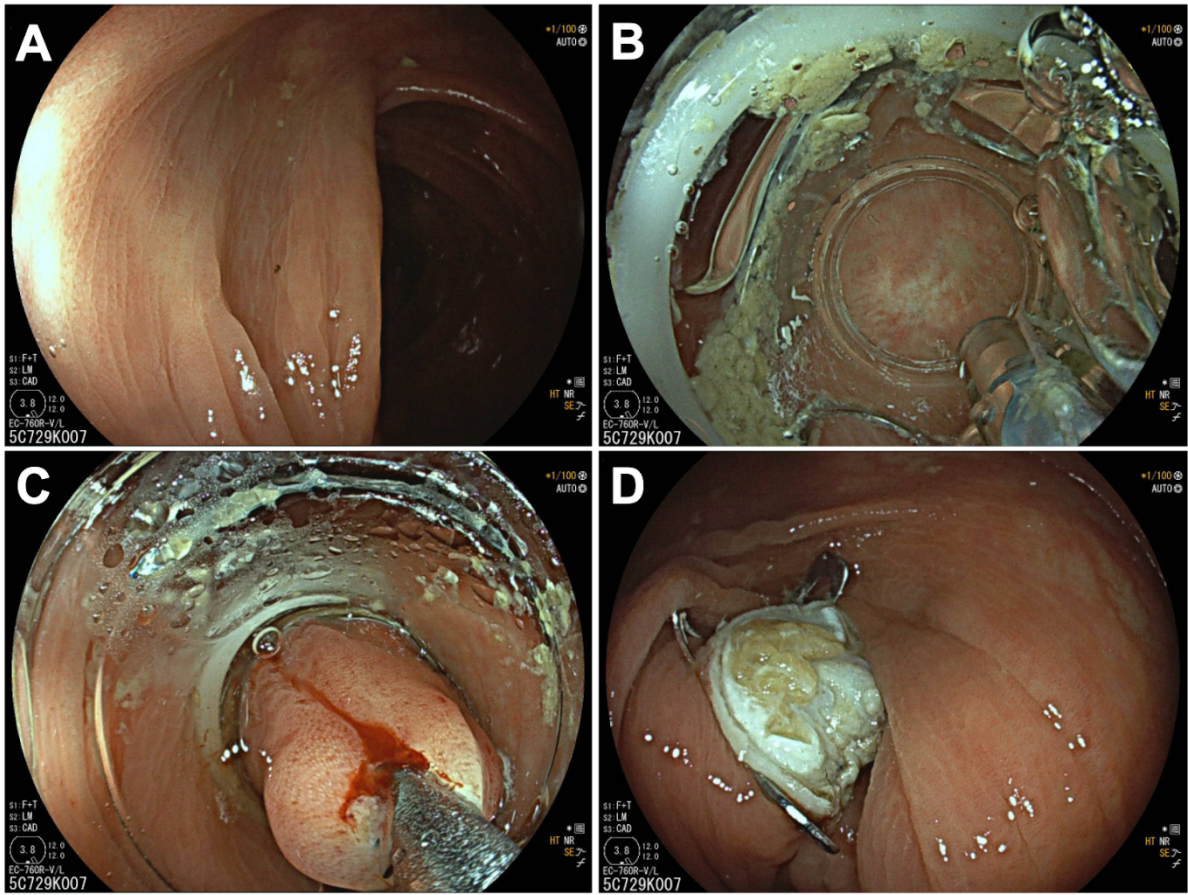
MJT performed study concept, data acquisition and manuscript preparation. LS, EGS, MGS performed study concept and manuscript preparation. PA performed study concept and manuscript editing and reviewing. MAC and PF performed manuscript editing and reviewing. All authors critically revised the manuscript, approved the final version to be published, and agreed to be accountable for all aspects of the work.

### **Data Availability Statement**

Data available upon request.

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**Figure Legend:** Endoscopic full-thickness resection of scar without superficial signs of recurrence (A) using FTRD (Ovesco) (B, C, and D).