Of 97 patients treated by TEM in the indicated period, 50 (52%) had an ERC (24 pTis and 26 pT1 with no adverse factors) and were the object of this study.

In all cases indication to local excision was mainly based on endorectal ultrasound staging. A full-thickness excision was always performed. Mean distance from the anal verge was 6 cm (range 3-12).

Intraoperative complications occurred in 4 (8%). In 3 cases the rectum was perforated and peritoneal cavity was entered, but the procedure was converted to laparotomy only in the first one. One case of major bleeding requiring transfusions occurred.

Post-operative complications affected 4 patients (8%). Three of them had minor bleeding while another presented a pneumoperitoneum with mild peritonitis that was treated conservatively.

Average follow-up was 61 months (range 6-160).

One patient with Tis carcinoma had an endoscopic mucosectomy 6 months later for mucosal persistence of adenomatous tissue.

One T1 patient had an anterior resection 12 months after TEM to treat a persistent adenomatous tissue that was technically not endoscopically removable.

Another T1 patient developed local recurrence after 18 months that was re-excised by TEM. In this case, final pathology showed a pT3 carcinoma but salvage surgery was not performed because of high co-morbidities. The patient had adjuvant radiotherapy and after 6-months there is no evidence of recurrence.

Our data confirm that TEM can be safely considered the treatment of choice of Early Rectal Cancer.