

Local Recurrence After Transanal Total Mesorectal Excision for Rectal Cancer: A Multicenter Cohort Study

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Abstract

Objective: This study aimed to determine local recurrence (LR) rate and pattern after transanal total mesorectal excision (TaTME) for rectal cancer.

Background: TaTME for mid- and low rectal cancer has known a rapid and worldwide adoption. Recently, concerns have been raised on the oncological safety in light of reported high LR rates with a multifocal pattern.

Methods: This was a multicenter observational cohort study in 6 tertiary referral centers. All consecutive TaTME cases for primary rectal adenocarcinoma from the first TaTME case in every center until December 2018 were included for analysis. Patients with benign tumors, malignancies other than adenocarcinoma and recurrent rectal cancer, as well as exenterative procedures, were excluded. The primary endpoint was 2-year LR rate. Secondary endpoints included patterns and treatment of LR and histopathological characteristics of the primary surgery.

Results: A total of 767 patients were identified and eligible for analysis. Resection margins were involved in 8% and optimal pathological outcome (clear margins, (nearly) complete specimen, no perforation) was achieved in 86% of patients. After a median follow-up of 25.5 months, 24 patients developed LR, with an actuarial cumulative 2-year LR rate of 3% (95% CI 2-5). In none of the patients, a multifocal pattern of LR was observed. Thirteen patients had isolated LR (without systemic disease) and 10/13 could be managed by salvage surgery of whom 8 were disease-free at the end of follow-up.

Conclusions and relevance: This study shows good loco regional control after TaTME in selected cases from tertiary referral centers and does not indicate an inherent oncological risk of the surgical technique.