

## Structured Training Pathway and Proctoring; Multicenter Results of the Implementation of Transanal Total Mesorectal Excision (TaTME) in the Netherlands

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### Abstract

**Background:** Transanal total mesorectal excision (TaTME) is a new complex technique with potential to improve the quality of surgical mesorectal excision for patients with mid and low rectal cancer. The procedure is technically challenging and has shown to be associated with a relative long learning curve which might hamper widespread adoption. Therefore, a national structured training pathway for TaTME has been set up in the Netherlands to allow safe implementation. The aim of this study was to monitor safety and efficacy of the training program with 12 centers.

**Methods:** Short-term outcomes of the first ten TaTME procedures were evaluated in 12 participating centers in the Netherlands within the national structured training pathway. Consecutive patients operated during and after the proctoring program for rectal carcinoma with curative intent were included. Primary outcome was the incidence of intraoperative complications, secondary outcomes included postoperative complications and pathological outcomes.

**Results:** In October 2018, 12 hospitals completed the training program and from each center the first 10 patients were included for evaluation. Intraoperative complications occurred in 4.9% of the cases. The clinicopathological outcome reported 100% for complete or nearly complete specimen, 100% negative distal resection margin, and the circumferential resection margin was positive in 5.0% of patients. Overall postoperative complication rate was 45.0%, with 19.2% Clavien-Dindo  $\geq$  III and an anastomotic leak rate of 17.3%.

**Conclusions:** This study shows that the nationwide structured training program for TaTME delivers safe implementation of TaTME in terms of intraoperative and pathology outcomes within the first ten consecutive cases in each center. However, postoperative morbidity is substantial even within a structured training pathway and surgeons should be aware of the learning curve of this new technique.