Does Total Neoadjuvant Therapy For Rectal Cancer Impact The Technical Difficulty Of Proctectomy?

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BACKGROUND

In recent years, **total neoadjuvant therapy (TNT)** has emerged as the standard of care for **locally advanced rectal cancer**[1].
Surgery is deferred till several months after completion of TNT[2,3], which may result in **dense tissue fibrosis**[4] **and increases technical difficulty of surgery**.
The influence of TNT on the operative difficulty of proctectomy remains unstudied.

AIMS

The primary aim of this study is to assess if **TNT (TNT RAPIDO)** is associated with **increased technical difficulty** of total mesorectal excision (TME) compared with **long-course chemoradiotherapy (LCRT)** and **upfront surgery (UPFRONT).**

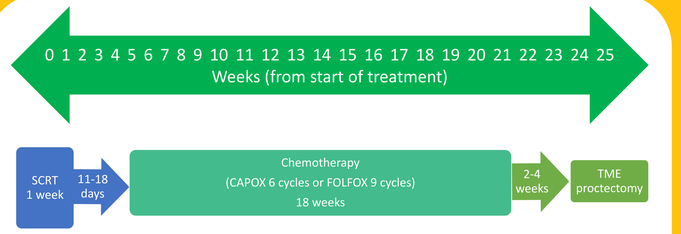
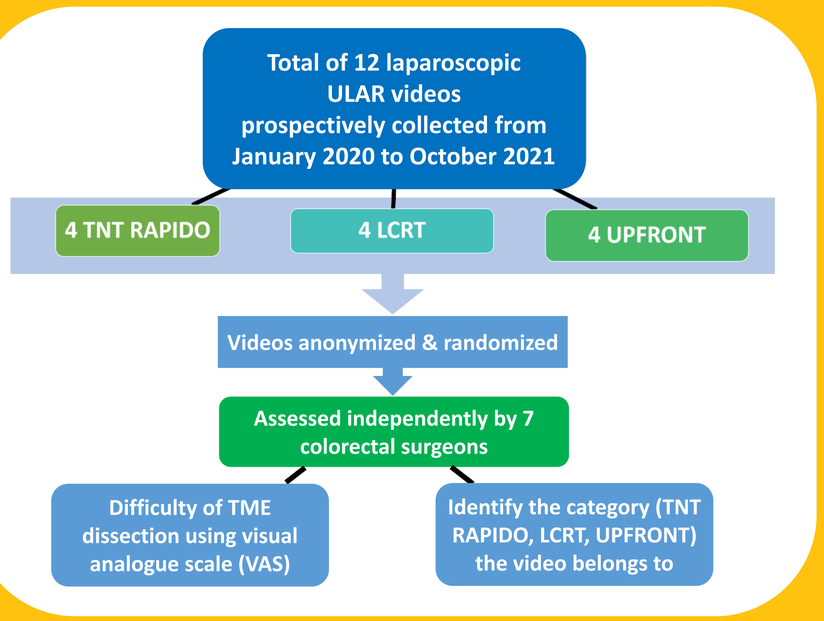


Figure 1: Total Neoadjuvant Therapy (TNT) RAPIDO protocol

METHODOLOGY



RESULTS

The median age of the patients was 67 years (45-76) with 10 males.
Median interval from completion of radiation therapy to surgery **was 13 (10-16) weeks** for the LCRT group and **24 (23-25) weeks** for the TNT RAPIDO group

There was **no significant difference** in the visual analogue scores for difficulty in TME dissection between the 3 groups. The assessors were able to correctly categorize the videos **42% of the time**.

	LCRT	TNT RAPIDO	UPFRONT	*p* value
Primary Observation (Assessment of Videos)				
Median Visual Analogue Scores (VAS) in centimetres (range)	3.2 (1.7-5.1)	4.6 (3.6-8.0)	4.1 (1.2-6.1)	0.115
% of surgeons who correctly identified treatment category	29%	71%	25%	0.010
Secondary observations (Objective Measures)				
Median operative time in minutes (range)	278 (286-365)	350 (283-520)	283 (206-335)	0.330
Median duration of hospitalisation in days, (range)	5 (4-8)	5 (4-5)	6 (5-7)	0.27
30-day Morbidity	1 (25%) (blood transfusion)	0	0	NA
30-day Mortality	0	0	0	NA

CONCLUSION

Proctectomy after TNT **does not appear** to be associated with increased technical difficulties during surgery. Further studies are required to investigate the impact of TNT on operative difficulty.

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