

TaTME Safety: A comparative analysis of laparoscopic and open-assisted approaches. The new surgical technique in a Tertiary Center

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Conclusions:

- ✓ No significant difference in overall complication rates or severity between laparoscopic and open-assisted TaTME.
- ✓ It was found according with C-D classification that patients with stapler anastomosis had an approximately 89% lower odds ratio for complications than those with manual anastomosis
- ✓ Laparoscopic TaTME leads to shorter hospital stays and potentially less perioperative bleeding according to HGB level.
- ✓ Age may be a factor in surgical duration, with older patients experiencing longer surgery times regardless of technique and did not correlate with increase of complications rates.
- ✓ The study showed that a longer duration of laparoscopic TaTME surgery was not associated with a higher rate of complications.

Results:

- ✓ TaTME: Laparoscopic & open methods comparable in safety and complications.
- ✓ Anastomosis type (stapler vs. manual) is the main predictor of complications.
- ✓ Laparoscopic TaTME advantages: Shorter hospitalization, higher free margin rate.
- ✓ Patient factors favoring laparoscopic TaTME: Younger age, better performance status, less comorbidities, higher tumor location.
- ✓ Hemoglobin recovery patterns: Laparoscopic TaTME stabilizes faster than open.

Aim: Analyze perioperative and postoperative complications in patients with low rectal tumors treated with laparoscopic TaTME vs. TaTME-open surgery.

Background: Briefly explain TaTME and the importance of assessing its safety for this procedure.

Materials & Methods: Patient Population: 87 patients diagnosed with low rectal cancer treated at DCOPIH (May 2016 - March 2020) Groups: Laparoscopic TaTME vs. TaTME-open surgery Outcome Measures: Clavien-Dindo classification of complications, short-term oncological outcomes, morphological and biochemical parameters Statistical

Analysis: Briefly mention the methods used (e.g., Chi-squared test for categorical data, ANOVA for continuous data).

Variable	Category	N	[%]
Technique	TaTME + lap	55	63,2
	TaTME + open	32	36,8
Sex	Male	69	79,3
Perioperative treatment	Y	62	71,3
	RTH	36	41,4
	CHTH-2	1	1,2
	RTH+CHTH	23	26,4
Anastomosis	Stapler	45	52,9
	Hand	40	47,1
Loop ileostomy	Yes	83	95,4
Clavien-Dindo complications	No	63	72,4
	I	5	5,8
	II	8	9,2
	IIIa	1	1,2
	IIIb	6	6,9
	IVa	3	3,5
Clavien-Dindo	minor ≤2	76	87,4
	serious >2	11	12,6
Reoperations		8	9,4
Readmissions		2	2,4
CRM+		2	2,3
Distal margin +		2	2,3
		N	mean
Lymph nodes excised		84	14,4

HGB level [g/dL]	M	SD	n
On admission			
TaTME + open	14.2	1.3	31
TaTME + laparoscopy	13.6	1.3	53
Total	13.8	1.3	84
After surgery			
TaTME + open	12.6	1.4	31
TaTME + laparoscopy	11.5	1.5	53
Total	11.9	1.6	84
At discharge			
TaTME + open	11.4	1.7	31
TaTME + laparoscopy	11.6	1.5	53
Total	11.5	1.6	84