

LAPAROSCOPIC VERSUS OPEN RIGHT CME COLECTOMY FOR RIGHT COLON CANCER: PRELIMINARY RESULTS OF A RANDOMIZED CONTROLLED TRIAL

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INTRODUCTION

Colorectal cancer is the third malignancy that affects both sexes. In 2009, Hohenberger proposed CME with the principles to include the dissection of Toldt's fascia and mesocolic preservation through the embryonic planes, the central vascular ligation and the extensive locoregional lymph nodes dissection. CME specimens provide larger specimens, intact mesocolic surface, more lymph nodes and better oncological results. Laparoscopic technique provides smaller trauma, lower risk for SSIs, less postoperative pain and hospitalization, lower morbidity and faster return to activities. Based on recent bibliography, there is no significant difference between laparoscopic and open technique, however the mesocolic plane is not always achieved, mainly regarding the laparoscopic surgery.

OBJECTIVE

The aim of this prospective RCT is to compare the two techniques in terms of specimen characteristics and short and long-term outcomes.

MATERIALS AND METHODS

- Inclusion criteria:**
 - Pathologically confirmed malignancy of right colon
 - CME/CVL resection
 - Age 18-90
 - ASA score ≤III
 - T ≤3
 - Elective surgery
 - Patient's consent

MATERIALS AND METHODS

- Methods:**
 - Prospective parallel RCT (09/2022-08/2025)
 - NCT05713903
 - University Hospital of Larissa
 - 114 patients to be included
 - Right colectomy
 - Lap:open 1:1
 - ERAS protocol
 - Follow-up according to oncological protocols
- Primary endpoint:** CME completion
- Secondary endpoints:**
 - Histopathologic characteristics of specimen and surgery characteristics
 - Morbidity and mortality postoperatively
 - Long-term oncological results



RESULTS

These are the preliminary results of the study.

Parameter	Lap(n=41)	Open(n=36)	p-value
Patient characteristics			
Age	70.17 (10.12)	78.02 (11.15)	0.002
BMI	28.02 (4.61)	27.87 (4.61)	0.874
F:M	18:23 (43.9%:56.1%)	18:18 (50%:50%)	0.593
Primary outcome			
Mesocolic plane: intramesocolic	40:1	35:1	0.926
Secondary outcomes			
Duration of surgery (min)	175.12(25.33)	125.29(15.27)	<0.001
Fresh length (cm)	34.28 (5.72)	34.12 (6.6)	0.915
High ligation to bowel (cm)	10.71 (1.56)	10.9 (1.3)	0.589
High ligation to tumor (cm)	12.88 (2.29)	12.78 (2.19)	0.85
Incision length (cm)	5.512(3.12)	21.77 (5.32)	<0.001
Extra: Intracorporeal anastomosis	28:12 (70%:30%)	15:0 (100%:0%)	0.016
Length of stay (days)	5.35 (2.1)	7.12 (2.25)	0.001
Septic complications	3.3%	0%	0.330
Other complications	13.3%	21.4%	0.415

Tumor site	Lap	Open	p-value: 0.298
Ascending colon	19 (46.3%)	14 (38.9%)	
Caecum	15 (36.6%)	17 (47.2%)	
Hepatic flexure	4 (9.8%)	5 (13.9%)	
Appendix	3 (7.3%)	0 (0%)	

Lymph nodes	Lap	Open	p-value: 0.298
LNs	20.95 (10.39)	19.55 (7.35)	0.614
Positive LNs	0.83 (2.73)	0.2 (0.69)	0.319

CONCLUSIONS

Preliminary results of this RCT suggest equivalence of the two approaches in the mesocolic resection rate, specimen quality and postoperative morbidity. The statistically significant differences are related to the length of incision, the duration of the surgery and the length of hospital stay.

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