Laparoscopic Surgery for Adhesive Small Bowel Obstruction

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INTRODUCTION

Short-term outcomes in laparoscopic surgery for adhesive small bowel obstruction (SBO) have been promising. Long-term outcomes remain controversial.
Objective: to compare the long-term recurrence of adhesive SBO between patients operated through laparoscopic and open approach.

METHODS

Retrospective study 2013-2020.
Patients who underwent surgery for acute adhesive SBO.
Exclusion criteria: ostomy and/or peritoneal carcinomatosis at the time of surgery.
Recurrent episode: readmission for bowel obstruction, whether it required surgery or not.
Laparoscopic surgery (LS) vs. open/converted surgery (OS).

Table 1. Intraoperative variables

	OS group	LS group	P value
Bowel resection	34 (23.6%)	0 (0%)	0.004
Vitality of the bowel			0.017
Vital	103 (71.5%)	27 (96.4%)	
Reversible ischemia	15 (10.4%)	1 (3.6%)	
Necrosis	26 (18.1%)	0 (0%)	
Perforation/Peritonitis	7 (4.9%)	0 (0%)	NS
Operative time	90 (20-420)	60 (30-180)	NS

Table 2. Short term follow up (30 days)

	OS group	LS group	P value
LOS	7 (1-129)	3 (1-97)	<0.001
Morbidity	45 (31.3%)	2 (7.2%)	0.008
I – II	31 (21.5%)	2 (7.2%)	
III or more	20 (13.8%)	0 (0%)	0.036
Mortality	6 (4.2%)	0 (0%)	NS
Reoperation	9 (6.3%)	0 (0%)	NS
Readmission	5 (3.5%)	0 (0%)	NS

Intraoperative findings.

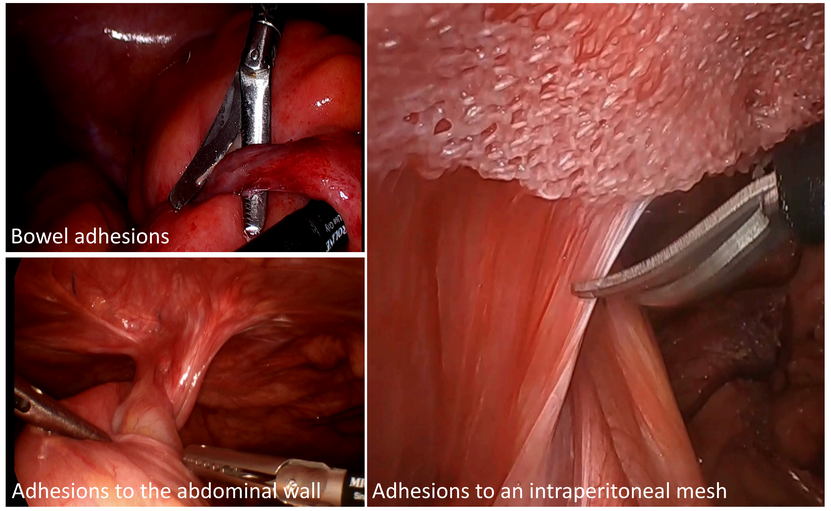


Table 3. Long term follow up

	OS group	LS group	P value
Median follow up; months	36.8 (0.3-91)	29.4 (0.7-90.6)	
Recurrence	22 (15.3%)	0 (0%)	0.027
Persistent symptoms	31 (21.5%)	1 (3.6%)	0.026

RESULTS

N=172 → OS group=144 LS group=28
Patients in OS higher median age, CPR and lactic acid.
No differences in sex, BMI, ASA classification, prior abdominal surgeries and previous SBO episodes.
Conversion in 15 patients (34.8%): bowel resection (5, 33%), bowel dilatation (5, 33%), adherences (4, 26.7%), enterotomy (1, 6.7%).
Intraoperative variables, short term (30 days) and long term follow up in tables 1, 2 and 3, respectively.

CONCLUSION

Laparoscopic surgery for SBO reduces postoperative morbidity and LOPS compared to open surgery.
It may reduce long-term recurrent episodes in selected patients.

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