

Does Abdominal Surgical History Affect Outcomes in Robotic-Assisted Colorectal Surgery?



Salini Hota MD, Salvatore A. Parascandola MD, Mayou Martin Tampo MD, Kathryn Cavallo MS, Vincent Obias MD

Background

Historically, patient selection for minimally-invasive surgery has been an important factor in predicting the success and safety of the procedure. Evidence-based recommendations on contraindications for minimally-invasive colorectal procedures are limited in current literature. A history of prior abdominal surgeries has been considered a risk factor for worse outcomes in minimally-invasive procedures. Limited visualization secondary to adhesions from prior abdominal surgeries is thought to influence the decision to offer open surgery to these patients.

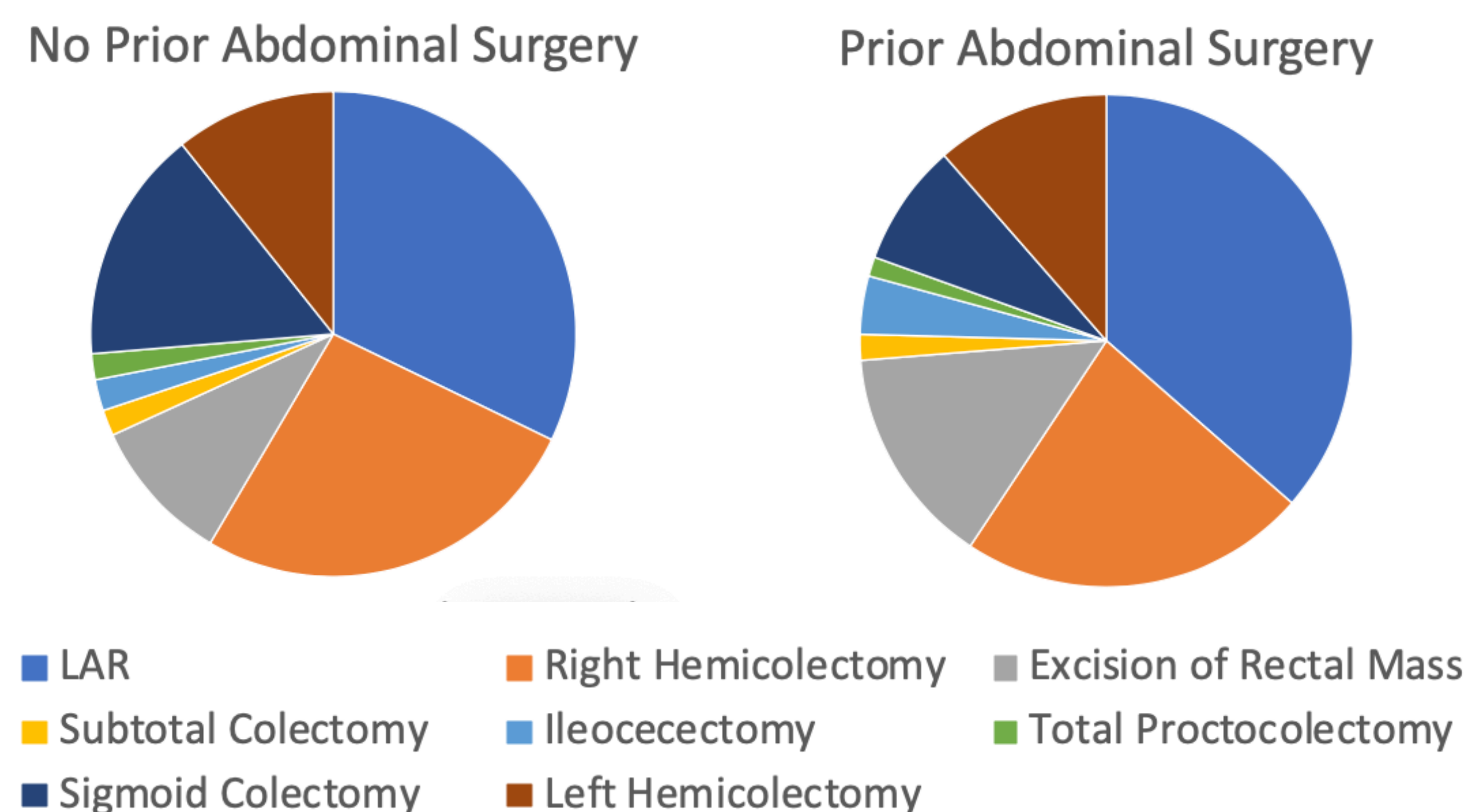
Research Question

Does a history of prior abdominal surgery affect post-operative outcomes following robotic-assisted colorectal surgery?

Methods

- Retrospective review of a single-surgeon's database of robotic-assisted colorectal surgeries
- 2009-2018
- 524 total patients
- Comparing peri- and post-operative outcomes

Results



Demographic	No prior abd surgery (n=289)	Prior abd surgery (n=236)	P-value
Age	57	59	0.277
BMI	28.5	29.3	0.174
ASA	2.4	2.4	0.936
HTN	131	125	0.082
DM	46	45	0.343
Smoking hx	58	34	0.090
Immune Suppression	18	14	0.888
Emergency Surgery	2	2	0.839

Outcome	No prior abd surgery (n=289)	Prior abd surgery (n=236)	P-value
Conversion to lap	3.11%	2.54%	0.696
Conversion to open	4.15%	4.66%	0.777
Leak	2.77%	3.39%	0.681
Wound Infection	8.65%	8.90%	0.921
Pneumonia	1.04%	1.27%	0.803
Length of Stay (days)	4.8	4.4	0.250
Re-admission	10.7%	14.8%	0.159
Re-intervention	7.27%	8.47%	0.609
Re-operation	2.77%	4.24%	0.358
Est Blood Loss (mL)	224	186	0.206
Operative Time (min)	247.7	242.0	0.546

There are no significant differences between any peri- or post-operative outcomes.

Conclusion

The peri-operative and post-operative outcomes in robotic-assisted colorectal surgery were similar amongst patients in the study population that have a prior history of abdominal surgery and those that do not. The results of this study suggest that a history of abdominal surgery may not need to be considered a relative contraindication for minimally-invasive colorectal surgery.



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