Attempting a Laparoscopic Approach in Patients Undergoing Left-Sided Colorectal Surgery Who Have Had a Previous Laparotomy: Is it Feasible?

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Abstract:

Background The feasibility of a laparoscopic approach in patients who have had a prior laparotomy (PL) remains controversial. We hypothesized that laparoscopic colorectal resection was safe and feasible in patients with previous open abdominal surgery. Methods A retrospective review (2007-2015) of all patients undergoing laparoscopic resection for sigmoid and rectal adenocarcinoma with or without prior midline laparotomy (NPL) was performed. Primary endpoints included conversion and perioperative morbidity. Secondary endpoints included length of stay and perioperative outcomes. Demographics, surgical history, oncologic staging, and short-term outcomes were reviewed. Results We identified 211 patients, of whom 33 (15.6%) had a prior laparotomy. Significantly more patients in the PL group were female (76.2 vs. 52.8%, p = 0.004). Patients with PL were of similar age to NPL patients (69.3 vs. 62.5, p = 0.09), and comorbidities, tumor staging, and neoadjuvant therapy were comparable between groups (all p > 0.05). Additional trocar placement was significantly higher in PL group (33.3 vs. 17.4%, p = 0.03), while conversion rate did not reach statistical significance (24.2 vs. 12.9%, p = 0.08). The postoperative complication rate was comparable between PL and NPL patients (33.3 vs. 25.3%, respectively, p = 0.2). Conclusions Prior laparotomy should not be a contraindication to patients undergoing laparoscopic colorectal surgery, though surgeons should anticipate a higher likelihood of conversion to open.

Keywords:

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