

AB023. SOH21AS241. Robotic right hemicolectomy versus laparoscopic right hemicolectomy: a case- matched study

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Background: Robotic surgery has emerged as an intriguing modality for treatment of colorectal cancer. Whilst the benefit of robotic surgery has been proven in pelvic surgery, there remains a scarcity of studies investigating benefits in abdominal surgery.

Methods: A comprehensively maintained database of robotic-assisted right hemicolectomy performed in our institution from 2016 to 2020 was interrogated. Variables including operating time, lymph node yield, margin status and blood loss were investigated. Similar datapoints were gleaned from patients undergoing laparoscopic right hemicolectomy procedures in the same time period via chart review.

Results: Overall, 77 patients were included in this study (male: 17/female: 18, average age: 66). Patients were categorised into robotic (n=35) and laparoscopic (n=43) resections. Within the robotic cohort, previous abdominal surgery had been performed in 3 patients for benign conditions. Average blood loss for robotic resections was 144.32 mLs. Operating time was 218.5 minutes on average for robotic operations with an average docking time of 34.6 minutes. Post-operative complications were recorded in 14 patients with Surgical Site Infections the most frequent (n=12). Reoperation was required for one patient with an anastomotic leak. The most common T stage resected was

T3 (n=11) with an average lymph node yield of 18.1.

Conclusions: Our findings indicate that robotic abdominal surgery is potentially non-inferior to laparoscopic surgery in the surgical management of colorectal cancer. Further studies with greater patient numbers will be required to confirm these results.

Keywords: Abdominal surgery; colorectal cancer; laparoscopic surgery; right hemicolectomy; robotic surgery

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Footnote

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Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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