



AB181. SOH22ABS230. A systematic review and meta-analysis of operative technique and clinical outcomes of robotic-assisted surgery for endometriosis involving the colon and rectum

Stephen Wrenn, Christina Fleming, Colin Peirce

Department of Surgery, University Hospital Limerick, Limerick, Ireland

Background: Endometriosis is estimated to affect 2–10% of the female population and up to 35% will require surgery for symptomatic or fertility treatment. Many cases requiring surgery are reported to have endometriosis with colorectal involvement with robotic-assisted surgery gaining popularity. The aim of this review was to analyse reported operative techniques and clinical outcomes of robotic assisted surgery (RAS) for endometriosis specifically with involvement of the colon or rectum.

Methods: A systematic review and meta-analysis was performed in keeping with PRISMA guidelines as appropriate and prospectively registered on PROSPERO. All studies reporting on RAS endometriosis surgery specifically with colorectal involvement were included. Studies were excluded if colorectal involvement was not reported as were review papers, conference abstracts and cases series reporting on five or less cases. Pooled outcomes were meta-analysed using RevManv5.

Results: Twenty-eight articles were included in the final review reporting on 3,328 patients. Papers were published from 2010–2021. Three main RAS-endometriosis operative techniques were performed including: shave excision, discoid resection and formal colorectal resection. Forty-six percent (n=13) of studies reported combined colorectal

and gynaecology multidisciplinary team (MDT) approach to surgery. Pooled conversion rate was 2%. Overall, complications were reported in 12–27% of patients. Complication rates were significantly higher in resectional cohorts ($P<0.01$).

Conclusions: Advanced endometriosis involving the colon and rectum can require both endometrioma excision and colorectal resection. RAS facilitates a minimally invasive approach to complex endometriosis resection with a low conversion rate and acceptable operative morbidity.

Keywords: Colorectal surgery; endometriosis; multidisciplinary team (MDT); operative outcomes; robotic surgery

Acknowledgments

Funding: None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

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.

Open Access Statement: This is an Open Access article distributed in accordance with the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License (CC BY-NC-ND 4.0), which permits the non-commercial replication and distribution of the article with the strict proviso that no changes or edits are made and the original work is properly cited (including links to both the formal publication through the relevant DOI and the license). See: <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

doi: 10.21037/map-22-ab181

Cite this abstract as: Wrenn S, Fleming C, Peirce C. AB181. SOH22ABS230. A systematic review and meta-analysis of operative technique and clinical outcomes of robotic-assisted surgery for endometriosis involving the colon and rectum. *Mesentery Peritoneum* 2022;6:AB181.