AB021. SOH21AS219. Perineal reconstruction following oncological extended rectal surgery: the role of the inferior gluteal artery myocutaneous flap

Jessica O'Reilly[1], Stephanie Bollard[2], Ann Brannigan[3], Jurgen Mulsow[3], Christine Quinlan[2], Shirley Potter[2]

[1]School of Medicine, University College Dublin, Dublin, Ireland; [2]Department of Plastic & Reconstructive Surgery, Mater Misericordiae University Hospital, Dublin, Ireland; [3]Department of Colorectal Surgery, Mater Misericordiae University Hospital, Dublin, Ireland

Background: Abdominoperineal resection (APR) and pelvic exenteration (PE), used in the management of low rectal and anal cancers, often result in pelvic dead space and therefore post-operative wound complications. The inferior gluteal artery myocutaneous (IGAM) flap has recently been described for the reconstruction of such defects, however it is not known how it compares to other commonly used flaps.

Methods: Data was collected retrospectively at two tertiary referral centres. All patients who underwent flap reconstruction of a perineal defect following APR or PE from January 2013 to September 2020 were included. Demographics, comorbidities, surgical management, neoadjuvant treatment and post-operative complications were tabulated and reconstructive outcomes analysed.

Results: A total of 16 patients met the inclusion criteria, resulting in 17 total reconstructions. The IGAM flap was utilised in n=10, and other myocutaneous reconstructions in n=7. No perineal wound complications occurred in the IGAM group, while 71.4% (n=5) occurred in the other group. Overall length of stay was shorter in patients who underwent reconstruction with the IGAM flap (21 *vs.* 30.4 days), with less patients requiring reoperation (10% *vs.* 71.4%). The most common complication overall was partial flap loss requiring reoperation (42.9%, n=3).

Conclusions: In this cohort, IGAM flap reconstruction was associated with a lower rate of perineal wound complications and reoperation, and a shorter hospital stay. This novel method of perineal reconstruction may improve outcomes for patients undergoing extensive resections for colorectal malignancy.

Keywords: Abdominoperineal resection (APR); inferior gluteal artery myocutaneous flap (IGAM flap); pelvic exenteration (PE); perineal reconstruction; perineal wound complications

Acknowledgments

Funding: None.

Footnote

Conflicts of Interest: JM serves as an unpaid editorial board member of *Mesentery and Peritoneum*. The other 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.

doi: 10.21037/map-21-ab021

Cite this abstract as: O'Reilly J, Bollard S, Brannigan A, Mulsow J, Quinlan C, Potter S. Perineal reconstruction following oncological extended rectal surgery: the role of the inferior gluteal artery myocutaneous flap. Mesentery Peritoneum 2021;5:AB021.