

AB075. SOH21AS027.**Prophylactic alpha-blockade as a strategy to reduce acute urinary retention post inguinal hernia repair in male patients: a retrospective and prospective analysis**

Alice Mary O'Neill¹, Matthew Gerard Davey^{1,2},
Louise Gobnait Collins¹, William Pius Joyce²

¹Department of Surgery, Galway Clinic, Doughiska, Co. Galway, Ireland; ²Royal College of Surgeons Ireland, Dublin, Ireland

Background: Post-operative urinary retention (POUR) is a common complication following inguinal hernia repair (IHR). The aim of this study was to assess the incidence of POUR following IHR and to investigate the benefit of prophylactic alpha-blockade (alpha-1 antagonist) on the development of POUR in a small cohort of high-risk male patients.

Methods: A single centre, retrospective cohort study was performed. IHR was performed by a single surgeon. Data was obtained from the electronic medical record. Data were analysed using descriptive statistics and Binary logistic regression. Prospective evaluation of consecutive 'high-risk' male patients was prescribed prophylactic alpha-1 antagonist 4-hour post IHR and rates of POUR recorded. 'High-risk' patients were defined as being 50 years or older, having prostate cancer or having benign prostatic hyperplasia (BPH).

Results: Analysis included 288 consecutive male patients (mean age 61.8±14.4 years; range, 18–93 years). Retrospective analysis observed a POUR rate of 12.2% (35/288), with those suffering POUR aged 69.3±12.5 years (range, 50–74 years). Using multivariable analysis, age >80 years [odds ratio (OR): 5.595, 95% confidence interval (CI): 1.451–21.574, P=0.012] and prostatic pathology (OR:

3.782, 95% CI: 1.153–12.406, P=0.028) independently predicted POUR. In the prospective study, 20 patients were 'high-risk' were given prophylactic alpha-1 blockade: All 20 were >70 years (range, 70–91 years), while 3 patients had BPH (15%). No patients developed POUR.

Conclusions: Older age and co-morbid prostatic pathologies are independent prognostic predictors of developing POUR. Prophylactic alpha-1 blockade may be indicated in those deemed 'high-risk' of urinary retention in order to enhance post-operative complications.

Keywords: Post-operative urinary retention (POUR); inguinal hernia repair (IHR); alpha 1 blockade; alfuzosin

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-21-ab075

Cite this abstract as: O'Neill AM, Davey MG, Collins LG, Joyce WP. Prophylactic alpha-blockade as a strategy to reduce acute urinary retention post inguinal hernia repair in male patients: a retrospective and prospective analysis. Mesentery Peritoneum 2021;5:AB075.