



AB070. SOH22ABS179. RETention of urine After INGuinal hernia Elective Repair I (RETAINER I): final results of an international multi-centre study

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Background: Post-operative urinary retention (POUR) is a recognised complication of inguinal hernia repair (IHR). Reported incidence is variable, and reporting of risk factors, contradictory. We aimed to report the rate, risk factors and impact of POUR post IHR.

Methods: A prospective, multicentre, international observational study was designed, with 4–16 weeks data collection periods (March–November 2021). Patients undergoing elective open/minimally-invasive inguinal hernia repair (IHR) were eligible. Exclusion criteria included a urethral catheter at baseline. Preoperative/intraoperative/postoperative variables were submitted via REDCap. Primary outcome was development of POUR. Secondary outcomes were risk factors for, and implications of, POUR.

Results: A total of 3,939 patients (200 centres; 28 countries) were registered. Mean patient age was 54.7 years (18–95 years), mean body mass index (BMI) 26.5. Approximately eighty-four percent (n=3,167) IHRs were performed open and 17% (n=674) minimally-invasively. The overall rate of POUR was 4.7% (n=181). Risk factors associated with POUR included: higher preoperative IPSS scores (mean 9.4 vs. 5.6 in non-POUR cohort, $P<0.001$), diagnosis of benign prostatic hyperplasia (BPH) ($P<0.001$) and use of spinal anaesthesia [odds ratio (OR) 1.85; 95% confidence interval (CI): 1.06–3.20]. Surgical approach did not influence POUR

($P=0.17$) when anaesthesia effect removed. Opioid analgesia or baseline alpha-blocker use showed no clear correlation with POUR. Forty percent of patients developing POUR required an unplanned admission.

Conclusions: RETention of urine After INguinal hernia Elective Repair I (RETAINER I) interim results suggest a global POUR rate of approximately 5% following elective IHR and confirm a significant impact of POUR on patients and hospital services. Findings highlight several risk factors and confirm the IPSS score as a potential risk stratification tool.

Keywords: Inguinal hernia; urinary retention; Daycare surgery; spinal anaesthesia; postoperative complications

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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.

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