The Use of Preoperative Tamsulosin for the Prevention of Postoperative Urinary Retention Following Inguinal Hernia Repair in Men

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Background

- Post operative urinary retention (POUR) is frequently encountered at a rate of 3-25% in inguinal hernia operations[1]
- The aim of this study is to assess the utility of tamsulosin for prevention of POUR

Methods

- Single academic institution
- Retrospective analysis 2017-2023
- Comparison of urinary retention rates in patients who received 7 days preoperatively and 7 days postoperatively of 0.4 mg tamsulosin
- Surgical technique: TAPP, TEP and Open
- REDCap utilized for data collection
- Chi squared/Fisher exact test utilized

Results

Table 1- Incidence of POUR with Tamsulosin

POUR	Yes	No	Total	Percentage
Tamsulosin	2	72	74	2.70%
No Tamsulosin	57	597	653	8.58%
Total	58	669	727	p=0.1087

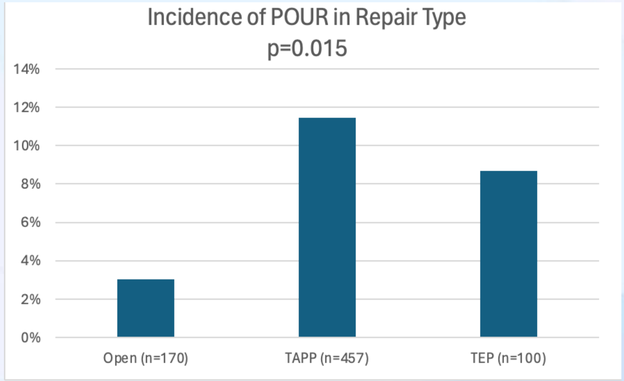


Table 2- Incidence of POUR in Repair Type

POUR	Yes	No	Total	Percentage
Open (n=170)	5	165	170	3.03%
TAPP (n=457)	47	410	457	11.46%
TEP (n=100)	8	92	100	8.69%
Total	60	667	727	p=0.015

Discussion

- Utilization of tamsulosin may reduce incidence of POUR but was not statistically significant
- Increased incidence of POUR based on type of inguinal hernia repair may help with patient selection for prophylactic tamsulosin administration
- Recent meta-analysis demonstrated POUR reduction rate with at least 2 doses of tamsulosin to 7.9% vs 21.2%[2]
- Small prospective study demonstrating POUR rates of 2.5% vs 15% p=0.04[3]
- Further prospective studies needed to refine patient selection criteria

References

1. Stallard S, Prescott S. Postoperative urinary retention in general surgical patients. *Br J Surg.* 1988;75:1141–1143
2. Calpin, Gavin G., et al. "Administering Prophylactic Alpha-Blockade to Reduce Urinary Retention Post Inguinal Hernia Repair: A Systematic Review and Meta-Analysis of Randomised Control Trials." *Surgery in Practice and Science*, vol. 14, Sept. 2023, p. 100204. *DOI.org (Crossref)*, https://doi.org/10.1016/j.sipas.2023.100204.
3. Mohammadi-Fallah M, Hamedanchi S, Tayyebi-Azar A. Preventive effect of tamsulosin on postoperative urinary retention. Korean J Urol. 2012 Jun;53(6):419-23. doi: 10.4111/kju.2012.53.6.419. Epub 2012 Jun 19. PMID: 22741052; PMCID: PMC3382693.

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