

## **DECREASING POSTOPERATIVE URGENCY FOLLOWING URETEROSCOPY: A RANDOMIZED CONTROLLED TRIAL**

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**Introduction:** Postoperative recovery immediately following ureteroscopy can be painful or extremely uncomfortable. The urgent need to void, despite an empty bladder, arises from bladder spasms often resistant to narcotic interventions. Administration of a belladonna and opium (B+O) suppository, a standard postoperative intervention, requires 15 to 30 minutes for opium and 1 to 2 hours for belladonna to act, longer than many ureteroscopy procedures.

**Identification of the Problem:** One in ten urological surgery patients experience postanesthesia emergence agitation with voiding urgency a major complaint. Agitation leads to tachycardia, hypertension and the demand or attempt to go to the bathroom even when not fully recovered from anesthesia; such behaviors create safety risks.

**Purpose of the Study:** To determine the effectiveness of preoperative B+O suppositories on postoperative bladder comfort, narcotic requirements and length of stay of ureteroscopy patients

**Methodology:** Fifty adult outpatient ureteroscopy patients were randomized to receive routine care or a B+O prior to insertion of the surgical scope. Postanesthesia nurses, blinded to group, provided routine post-operative care including assessment of urinary urgency (0-4) and pain (0-10) every 15 minutes and prior to discharge.

**Results:** Urgency scores were significantly lower in the experimental group ( $p = .018$ ). Mean pain scores, narcotic requirements or length of stay were no different. Both groups required rescue interventions. Less than half of patients in the experimental group reported urgency at discharge compared to the control group (44% vs 84%).

**Discussion:** This is the first study to test the effectiveness of pre-emptive B+O administration on outpatient ureteroscopy patients. Pre-emptive B+O suppositories reduce bladder spasms as reflected in patients' reports of urgency. Patients in this study discriminated urgency from post-operative pain, an indication that the constructs differ. In addition, treatment for urgency did not influence treatment for pain.

**Conclusion:** Pre-emptive administration of a B+O suppository prior to ureteroscopy results in decreased urinary urgency during the post-operative period.

**Implications for Perianesthesia Nurses and Future Research:** Urinary urgency can be discriminated from surgical pain and should be assessed post operatively. The efficacy of preemptive B+O suppositories on other urological procedures warrants further research. The addition of the order for a pre-emptive B+O suppository on pre-operative ureteroscopy order sets is recommended. Pre-emptive interventions can result in positive outcomes prior to discharge.