Urogynecology digest

Presented by Autumn Edenfield

Do belladonna and opium rectal suppositories decrease postoperative pain following vaginal apical prolapse surgery?

Butler K, Yi J, Wasson M, Klauschie J, Ryan D, Hentz J, Cornella J, Magtibay P and Kho R. Randomized controlled trial of postoperative belladonna and opium rectal suppositories in vaginal surgery. *Am J Obstet Gynecol.* 2017;216:491.e1–6.

This is a prospective randomized double-blind, placebo-controlled trial comparing belladonna and opium 16A 16.2 mg/60 mg (B&O 16A) rectal suppositories to placebo in women who underwent vaginal surgery including a uterosacral ligament at the Mayo Clinic Arizona, USA. The primary outcome is pain scores at 4 h after surgery. Secondary outcomes include pain scores at 2, 12, and 20 h after surgery; narcotic use, antiemetic use, and scores from a validated quality of recovery questionnaire; side effects of urinary retention, and reports of constipation. Narcotics are often used following vaginal surgery, and these medications can increase sedation, nausea, and constipation. Prior studies with hysterectomy show that rectal analgesia decreases pain scores and results in less narcotic use and may have fewer side effects. This study randomized women undergoing vaginal surgery and uterosacral ligament suspension to the B&O 16A suppository or placebo group and assessed pain at the end of surgery and every 8 h for a total of three doses. Investigators recorded pain scores using a 10-point visual analog scale (VAS), narcotic intake using morphine equivalents, antiemetic use, constipation, and urinary retention >150 ml on postvoid residual.

The study was powered to show a 2-point difference ± 3.3 on the pain scale between groups, with a total of 90 individuals and using 80% power and an alpha of 0.05. Of the 142 patients assessed, 103 were randomized and 90 were included in the analysis (41 in the B&O 16A group and 49 in the placebo group). No differences in demographics or perioperative parameters were noted between groups. There were no differences between groups in any outcome. The 4-h pain scores were similar (4.2 ± 2.4 B&O 16A versus 4.1 ± 2.1 placebo; $p = 0.82$). All other pain scores, nausea, emesis, and overall satisfaction were similar between groups. Ketorolac, antiemetic, and narcotic use was also similar between groups. Mean morphine equivalents within the first 24 h were 57 ± 38 mg for the B&O 16A and 66 ± 61 mg for the placebo group ($p = 0.43$). Adverse effects of constipation and urinary retention were also similar. There was only one serious adverse event of a small-bowel perforation in a B&O 16A patient and was likely a result of more extensive surgery and not the intervention technique.

The study is limited by the exclusion of those with chronic pain and potential bias regarding decision making about postoperative pain management. Strengths include rigorous randomized double-blind, placebo-controlled design and use of validated outcome measures. The key conclusion is that following vaginal surgery including a uterosacral ligament suspension, B&O 16A suppositories do not decrease pain scores or narcotic use following vaginal surgery but are safe to use and do not increase anticholinergic side effects.

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