

FPIN's Help Desk Answers

NSAIDs for Postpartum Perineal Pain

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Clinical Question

Are nonsteroidal anti-inflammatory drugs (NSAIDs) effective in the treatment of postpartum perineal pain?

Evidence-Based Answer

Women with third- or fourth-degree perineal lacerations or who received an episiotomy can be given oral NSAIDs to reduce perineal pain in the first six hours postpartum. (Strength of Recommendation [SOR]: B, based on a meta-analysis of low-quality randomized controlled trials [RCTs].) Women who received an episiotomy may have a reduction in postpartum pain scores after receiving NSAID rectal suppositories and are less likely to request more analgesia. (SOR: B, based on a meta-analysis of heterogeneous RCTs and a small international RCT.)

Evidence Summary

A 2016 systematic review and meta-analysis (28 RCTs; N = 4,181) of nonbreastfeeding women with third- or fourth-degree perineal lacerations or episiotomy during vaginal delivery compared single-dose oral NSAIDs with placebo for the treatment of perineal pain.¹ Fourteen different NSAIDs were evaluated; aspirin (500 to 650 mg), ibuprofen (300 to 800 mg), and meclfenamate (100 to 200 mg) were the most commonly used. Pain was assessed by patient report at four and six hours postpartum using

various nonstandardized methods. Women receiving an NSAID were more likely to achieve at least a 50% reduction of pain at four hours after delivery (10 studies; N = 1,573; relative risk [RR] = 1.9; 95% confidence interval [CI], 1.6 to 2.2) and at six hours (17 studies; N = 2,079; RR = 1.9; 95% CI, 1.7 to 2.2) than women receiving placebo. Women who received an NSAID were also less likely to need additional analgesia at four hours after initial administration (four studies; N = 486; RR = 0.39; 95% CI, 0.26 to 0.58) and at six hours (10 studies; N = 1,012; RR = 0.32; 95% CI, 0.26 to 0.40). There were no statistical differences between NSAID type or dosage. At six hours, there was no difference in overall maternal adverse effects (13 studies; N = 1,388; RR = 1.4; 95% CI, 0.71 to 2.7). None of the studies assessed neonatal adverse effects. The individual studies were of low or very low quality because of lack of standardization, and they generally took place in the 1980s, when episiotomy was more common.

A 2003 systematic review (two RCTs; N = 150) compared NSAID rectal suppositories (indomethacin, diclofenac, and naproxen) with placebo for relief of perineal pain after episiotomy.² One of the RCTs also included women with second-degree perineal lacerations. Both trials reported perineal pain at 24 hours after delivery. There was significant heterogeneity between the studies. Women receiving NSAID suppositories were

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less likely to need additional analgesia at 24 hours postpartum (one study; $n = 89$; $RR = 0.31$; 95% CI, 0.17 to 0.54) and at 48 hours (one study; $n = 89$; $RR = 0.63$; 95% CI, 0.45 to 0.89). Adverse effects were not reported.

A 2008 double-blind RCT of 142 patients in Thailand evaluated naproxen rectal suppositories vs. placebo for reducing perineal pain after vaginal delivery with mediolateral episiotomy.³ Patients received an initial 275-mg naproxen suppository or placebo immediately after completion of perineal suturing, then a second dose was given six hours later. Pain was evaluated using the validated Thai short-form McGill Pain Questionnaire (total score of 0 to 45 points, with higher numbers signifying more pain). Women receiving naproxen suppositories reported less perineal pain at six hours postpartum compared

with those in the placebo group (6.4 vs. 18 points; $P < .001$) and at 24 hours (2.3 vs. 5.5 points; $P < .001$). No adverse effects were noted.

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