

FPIN's Help Desk Answers

Antepartum Perineal Massage for Intrapartum Lacerations

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Clinical Question

Does antepartum perineal massage reduce intrapartum lacerations?

Evidence-Based Answer

Digital antepartum and intrapartum perineal massage did not decrease perineal lacerations compared with a control group. (Strength of Recommendation: A, based on a meta-analysis.) Digital antepartum perineal massage reduced the incidence of trauma requiring suturing by 9% and the likelihood of episiotomy by 16% in patients without a previous vaginal birth. Digital intrapartum perineal massage resulted in higher rates of intact perineum and a lower incidence of episiotomy in nulliparous patients.

Evidence Summary

A 2013 Cochrane review analyzed four randomized controlled trials (RCTs) and quasi-RCTs (N = 2,497) in which patients planning on vaginal delivery received self- or partner-administered digital antepartum perineal massage.¹ This was defined as three to 10 minutes of intravaginal perineal massage with almond oil, three to seven days a week, starting at 34 weeks' gestation until delivery. Three of the studies included patients without previous vaginal births; the last trial included patients with previous vaginal birth.

The primary inclusion criterion was any digital perineal massage during the last four weeks of pregnancy. Patients at high risk of cesarean delivery were excluded. Participants were instructed not to inform their birth attendants of their allocation. In patients without a previous vaginal birth who had digital antepartum perineal massage, there was a 9% decrease in perineal trauma that required suturing (relative risk [RR] = 0.91; 95% CI, 0.86 to 0.96; number needed to treat [NNT] = 15) and a 16% decrease in episiotomy (RR = 0.84; 95% CI, 0.74 to 0.95; NNT = 21).

There was no difference between patients receiving perineal massage and the control group for having a first- (RR = 0.96; 95% CI, 0.78 to 1.19), second- (RR = 0.99; 95% CI, 0.85 to 1.15), or third- or fourth-degree laceration (RR = 0.81; 95% CI, 0.56 to 1.18). Three of the four studies included attestation by authors that blinding of outcome assessment was upheld. All of the included studies were high quality and had a low risk of bias. Methodologic limitations included risk of reporting bias in an included small pilot RCT and lack of reported randomization in another included study. The data were insufficient regarding secondary outcomes that might hinder patients from performing perineal massage, such as patient satisfaction with digital massage or concern about postpartum perineal pain.

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HELP DESK ANSWERS

A 2018 meta-analysis analyzed the effect of midwife-performed digital intrapartum perineal massage by analyzing nine RCTs ($N = 3,374$).² Six of the nine trials included only nulliparous patients ($n = 2,079$). Participants were at 36 to 42 weeks of gestation with singleton pregnancies in cephalic presentation. Exclusion criteria included other techniques studied to decrease perineal tears: warm compresses, Ritgen maneuver (hands-on pressure on perineum to facilitate fetal head extension), and perineal devices. Digital intrapartum perineal massage used the middle and index fingers to gently stretch out the perineum during the second stage (five trials) or the late first stage of labor (four trials). The massage was performed during the push time (three trials), after push time (three trials), and during or between push time (three trials). Nulliparous patients who received intrapartum perineal massage had a higher rate of intact perineum ($RR = 1.40$; 95% CI, 1.01 to 1.93), and episiotomy incidence was notably lower ($RR = 0.56$; 95% CI, 0.38 to 0.82). There was no significant reduction in

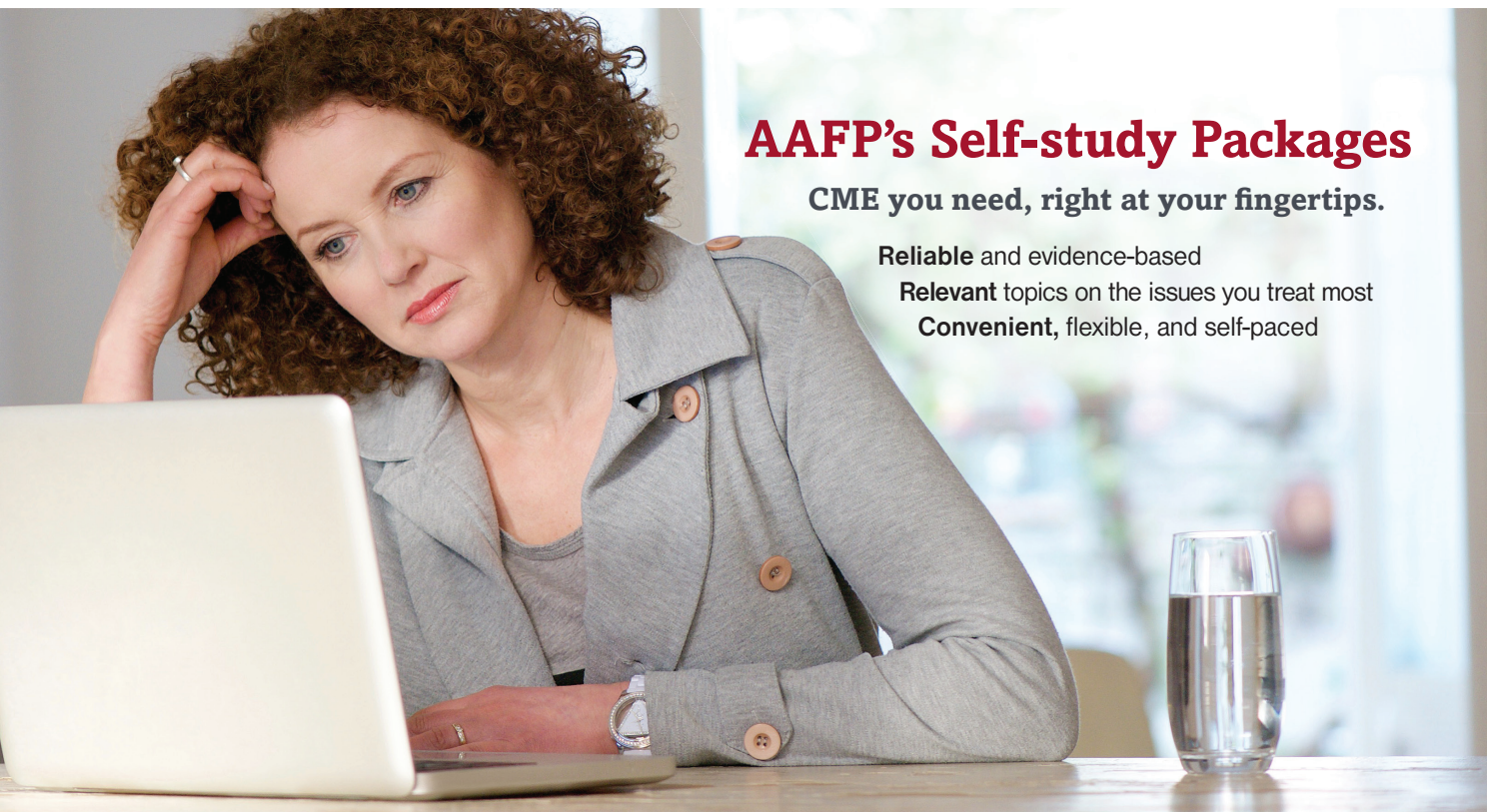
first- ($RR = 1.21$; 95% CI, 0.92 to 1.59), second- ($RR = 0.99$; 95% CI, 0.77 to 1.27), third- ($RR = 0.57$; 95% CI, 0.16 to 2.02), or fourth-degree lacerations ($RR = 0.26$; 95% CI, 0.04 to 1.61). Third- and fourth-degree lacerations were reported by only five RCTs. The rate of episiotomies reported was 20% to 30%, which is significantly higher than what occurs in practice today. Thus, the low rate of episiotomy in the interventional group of the study has unclear clinical significance. The type of intervention prevented double-blinding.

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References

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