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Do any folk remedies or herbals help induce labor?

Evidence-based answer

Yes, some do. Breast stimulation and electroacupuncture help, while other common remedies that have been studied are ineffective, possibly unsafe, or both. Unilateral breast stimulation shortens the time until the onset of labor in women at term (strength of recommendation [SOR]: **A**, systematic review). Electroacupuncture also may stimulate the onset of labor (SOR: **C**, observational studies).

Sexual intercourse doesn't appear to ripen the cervix or stimulate labor (SOR:

C, 1 observational study). Castor oil universally produces nausea and doesn't promote labor (SOR: **C**, low-quality case-control study). Red raspberry leaf is likely safe but ineffective (SOR: **B**, 1 small randomized controlled trial); evening primrose oil is ineffective and possibly unsafe (SOR: **B**, 1 small retrospective cohort study); black cohosh and blue cohosh lack evidence of efficacy and may be unsafe (SOR: **C**, expert opinion and case reports).

Clinical commentary

So many remedies, so little knowledge

Obstetrics seems to have more folk remedies than any other area of medicine—castor oil, teas, magnets, exercises, herbs, incantations, moxibustion, and so on. When I was a younger doctor, 5 of my patients tried castor oil to induce labor at term. Four had the baby within 2 days, but all were so sick with nausea and diarrhea that they swore off castor oil for future pregnancies.

Therein lies the rub with many folk remedies—not only do we know little about their benefits, but we don't know their harms either. As a result of this review, I can now prescribe breast stimulation in good faith, and I'll continue to advise against castor oil.

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Evidence summary

Breast stimulation works

A systematic review of 6 trials with a total of 719 participants compared unilateral breast stimulation with no intervention to induce labor in women at term.¹ In 2 trials, the 300 participants stimulated 1 breast for 1 hour a day for 3 days; in the other 4 trials, 419 women stimulated either breast alternately for 3 hours a day.

Breast stimulation significantly reduced the number of women who hadn't gone into labor at 72 hours compared with nonintervention (62.7% vs 93.6%; relative risk [RR]=0.67; 95% confidence interval [CI], 0.60-0.74; number needed to treat [NNT]=3.2). This result remained significant when primiparous and multiparous women were analyzed separately, but not in the 1 trial (37 participants)

FAST TRACK

Most common remedies to induce labor—except breast stimulation and electroacupuncture—are not effective, possibly unsafe, or both

that reported on women with an unfavorable cervix.¹ Breast stimulation also reduced postpartum hemorrhage (0.7% vs 6%; RR=0.16; 95% CI, 0.03-0.87; NNT=18.8).

None of the trials documented uterine hyperstimulation or meconium-stained fluid, and they didn't find significant differences in the rates of cesarean section (9% vs 10%; RR=0.90; 95% CI, 0.38-2.12). One trial reported 4 perinatal deaths in a high-risk population—3 in the breast stimulation group and 1 in the control group—but this finding was not replicated in any other trials.¹

Acupuncture may also help

A Cochrane systematic review evaluating acupuncture for inducing labor identified 1 randomized trial with methodologic flaws (allowing no conclusion), 3 case series, and 2 nonrandomized trials. The first case series used electroacupuncture at 38 to 42 weeks to successfully induce labor in 21 of 31 women. The second series, using acupuncture with and without electrical stimulation, induced labor in 10 of 12 women at 19 to 43 weeks. The third study induced labor with electroacupuncture in 78% of 41 women—34 term and post-term patients and 7 with a fetal demise.

In the first nonrandomized trial, 20 of 27 women at term who received electroacupuncture gave birth between 39 weeks 3 days and 40 weeks, compared with 47 of 102 women in the control group. In the second study, 31 of 35 women who received electroacupuncture reported increased intensity of contractions compared with none of the 35 women in the control group.²

Sexual intercourse induces pregnancy, not labor

A Cochrane systematic review found 1 observational study of the effect of sexual intercourse on cervical ripening and induction of labor among 28 women at term. The study evaluated cervical Bishop scores after sexual intercourse with intravaginal semen deposition for

3 consecutive nights compared with no intercourse. The difference in Bishop score was not significant (1.0 with coitus vs 0.5 controls; $P>.05$) and no difference in the number of women who delivered within 3 days was noted in the 2 groups (RR=0.99; 95% CI, 0.45-2.20).³

Castor oil made women nauseous

A Cochrane systematic review included 1 study of women at term with intact membranes who received 1 dose of castor oil to induce labor (n=52) compared with no treatment (n=48). All women who received castor oil felt nauseous, but no other differences were noted between the castor oil group and controls in rates of cesarean section, meconium-stained fluid, or Apgar scores less than 7 at 5 minutes.⁴

Herbal preparations raise many questions—and some concerns

A prospective controlled trial that randomized 192 women to receive either red raspberry leaf tablets (1.2 g twice daily beginning at 32 weeks) or placebo found no significant differences in duration of the first stage of labor or birth outcomes. Symptom surveys of 108 women revealed no adverse effects.⁵

A retrospective cohort study compared pregnancy outcomes in 54 women who took evening primrose oil (500 mg 3 times a day beginning at 37 weeks) with a matched group of 54 women who did not take it. The study found no significant differences between the groups in maternal age, Apgar scores, or days of gestation. However, the women taking evening primrose oil tended to have protracted active phase of labor, prolonged rupture of membranes, arrest of descent, and oxytocin augmentation (none of which were statistically significant).⁶

A systematic review of the literature on black cohosh in pregnancy found no trials that evaluated its efficacy for inducing labor.⁷ A review of herbal preparations used by midwives reported a case of an infant with low Apgar scores after black cohosh use.⁸ Both articles described black



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Evening primrose oil, black cohosh, and blue cohosh may be unsafe

cohosh as potentially unsafe because of the lack of trials demonstrating safety and possible deleterious estrogenic effects.

A systematic review of the literature on blue cohosh found only in vitro studies of efficacy (increased estradiol-induced transcription in estrogen-responsive cells and increased tone in excised guinea pig uteri) and 3 case reports of maternal adverse events after ingestion (perinatal stroke, congestive heart failure with shock, and multiorgan hypoxic injury).⁹ In vitro evidence presented in the review suggests that blue cohosh may have teratogenic, embryotoxic, and oxytocic effects.

Recommendations

We found no recommendations from professional organizations regarding folk methods to stimulate labor. The authors of a survey of herbal preparations used by midwives do not advocate their use in pregnancy because of unknown risks to the fetus, although “raspberry leaf tea does not seem to have any significant pharmacologic activity and is probably safe.”⁸ ■

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