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BRIEF COMMUNICATION

Extra-amniotic saline infusion vs. cervical traction with Foley catheter for second-trimester pregnancy termination

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KEYWORDS

Second-trimester pregnancy termination; Extra-amniotic saline infusion; Cervical traction

A randomized controlled trial was performed to compare the efficacy of extra-amniotic saline infusion (EASI) and intracervical traction with a Foley catheter for pregnancy termination.

The study population consisted of 200 women with a pregnancy duration of 14 to 28 weeks and an indication for pregnancy termination. Inclusion criteria were an absence of effective uterine contractions, intact membranes, no other method of termination previously used, singleton pregnancy, and Bishop score less than 2. The women were

randomly assigned to 1 of 2 groups, 100 to the EASI group and 100 to the traction group.

In the traction group, a No. 18 Foley catheter was introduced into the cervix and fixed, and the other end of the catheter was attached to a 500-mL bag of serum and suspended from the patient's bed to produce a constant traction in the cervix. An oxytocin infusion was then started intravenously at incremental doses, and continued until delivery after spontaneous expulsion of the Foley catheter or for a duration of 5 h if the Foley catheter was not expelled. In the latter case, the balloon was emptied and taken out, and this protocol was repeated the next day.

In the EASI group, after the insertion of the Foley catheter, the infusion of a normal saline solution into the extra-amniotic space was initiated and an oxytocin infusion was started intravenously at incremental doses.

The number times each protocol was performed and the time from initiation of labor induction to delivery was recorded.

There were no differences in age, parity, previous number of vaginal deliveries, gestational age, Bishop score, and live birth between the 2 groups.

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Table 1 Number of hours between labor induction and delivery according to pregnancy duration

Pregnancy duration, wk	Traction method	EASI method
14-17	$\textbf{32.7} \pm \textbf{8.02}$	25.41 ± 7.43
17–20	$\textbf{26.50} \pm \textbf{5.12}$	$\textbf{20.69} \pm \textbf{5.01}$
20-23	$\textbf{21.48} \pm \textbf{10.85}$	$\textbf{18.88} \pm \textbf{9.48}$
23–26	19.61 ± 12.03	17.21 ± 10.93
26-28	12.87 ± 10.43	12.20 ± 9.34

Abbreviation: EASI, extra-amniotic saline solution.

The mean intervals between initiation of labor induction and delivery in the EASI and traction groups were 18.1 ± 8.53 and 21.4 ± 11.07 h, respectively, and there was a statistically significant difference (P=0.02).

The success rates of the first attempt at delivery in the EASI and traction groups were 67% and 59%, with no significant difference.

Delivery occurred after the second attempt in 29% and 35% of the women in the EASI and traction groups, and after the third attempt in 4% and 6% of the women, with no significant differences.

For both methods of pregnancy termination in the second trimester, there was a statistically significant reverse correlation between duration of pregnancy and time between initiation of labor induction and delivery (Table 1) (P<.001).

For both methods, there was no correlation between mode of previous delivery and success rate or time between initiation of labor induction and delivery.

No complications were observed in either group. These 2 methods are inexpensive, simple, safe, and effective, but the EASI method was faster than the traction method in this study. Multiple published studies have shown that EASI method is similar in efficacy to other methods of cervical ripening and labor induction [1–4], but it is easier to use and is associated with fewer complications.

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