Induction of Labor Using a Foley Balloon, With and Without Extra-Amniotic Saline Infusion

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Abstract

Objective: To compare transcervical Foley bulb with and without extra-amniotic saline infusion for induction of labor in patients with an unfavorable cervix.

Methods: Women who presented for induction of labor with Bishop score less than 5 were randomly assigned to receive Foley alone or Foley with extra-amniotic saline infusion for induction of labor. Primary outcome was time from start of induction to vaginal delivery. Secondary outcomes were cesarean delivery rates, incidence of chorioamnionitis, Apgar scores at 1 and 5 minutes, and adverse events.

Results: One hundred forty women completed the study. Time from induction to vaginal delivery was 16.58 (+/- 7.55) hours in the extra-amniotic saline infusion group compared with 21.47 (+/- 9.95) hours in the Foley group (P < .01). Chorioamnionitis occurred in 4 of 66 (6.1%) women in the extra-amniotic saline infusion group compared with 12 of 74 (16.2%) women in the Foley group (P = .067). Cesarean delivery rate was 21.2% versus 20.1% in the extra-amniotic saline infusion and Foley groups, respectively (P = 1.0). Median 1-minute and 5-minute Apgar scores were 9 in both groups. Adverse events were rare and unrelated to method of induction.

Conclusion: Induction of labor by using Foley with extra-amniotic saline infusion results in shorter induction-to-vaginal-delivery time than Foley alone, without affecting cesarean delivery rates.

Level of evidence: ||-|

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Lin MG, Reid KJ, Treaster MR, Nuthalapaty FS, Ramsey PS, Lu GC. Obstet Gynecol. 2007 Sep;110(3):558-65. doi: 10.1097/01.AOG.0000278077.30890.87. PMID: 17766600 Clinical Trial.

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 - Levey KA, MacKenzie AP, Stephenson C, Bercik R, Kuczynski E, Funai EF. Obstet Gynecol. 2004 Apr;103(4):724-8. doi: 10.1097/01.AOG.0000118308.65550.f6. PMID: 15051565
- Other mechanical methods for pre-induction cervical ripening.
 Durie D, Lawal A, Zegelbone P. Semin Perinatol. 2015 Oct;39(6):444-9. doi: 10.1053/j.semperi.2015.07.006. Epub 2015 Sep 2. PMID: 26341067 Review.
- [Induced labor by mechanical methods. Advantages and disadvantages].

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- Mechanical methods for induction of labour.
 de Vaan MD, Ten Eikelder ML, Jozwiak M, Palmer KR, Davies-Tuck M, Bloemenkamp KW, Mol BWJ, Boulvain M. Cochrane Database Syst Rev. 2019 Oct 18;10(10):CD001233.
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 Sharma KJ, Grubbs BH, Mullin PM, Opper N, Lee RH. J Perinatol. 2015 Jun;35(6):390-5. doi: 10.1038/jp.2014.229. Epub 2015 Jan 8. PMID: 25569680 Clinical Trial.
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