



21. METHODS OF TERM LABOR INDUCTION FOR WOMEN WITH A PREVIOUS CAESAREAN SECTION

Author: Curlat Vlad

Scientific advisor: Marian-Pavlenco Angela, MD, PhD, Associate Professor, Obstetrics, Gynaecology and Human Reproduction Discipline, Obstetrics and Gynaecology Department, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. The term pertains to diverse methodologies employed for the initiation of parturition in gravid individuals who have previously had a cesarean section(c-sec) and have reached the full term gestational period. The objective is frequently the facilitation of a vaginal birth subsequent to a prior cesarean (VBAC). Women with a c-sec history may elect to pursue a VBAC for next pregnancy, the instigation of labor becomes imperative to commence the parturient process. In case of induction for VBAC, there is a risk of uterine rupture, marked by the tearing of the scar tissue from the last c-sec during contractions.

Aim of study. This research aims to explore and evaluate different methods used to start labor in pregnant individuals who have had a c-sec and are at full term pregnancy. The focus of this review is to describe techniques that may be applied with no or minimal sequelae for both mother and fetus.

Methods and materials. In leading this literature review, I used 16 articles from PubMed, ScienceDirect database to explore crucial terms like "VBAC", " Labor induction in women with prior c-sec," "Outcomes in VBAC induction".

Results. Exploring the literature reveals rich insights into diverse labor induction methods and their respective effects on both maternal and fetal outcomes. 1. In comparing vaginal PGE2 to intravenous oxytocin in a trial with 42 women, there were no vast differences in terms of c-sec risk (RR 0.67, 95% CI 0.22 to 2.03, low-quality evidence) or serious neonatal and maternal morbidity or death (RR 3.00, 95% CI 0.13 to 69.70, evidence graded low). Notably, no clear distinctions were observed for reported secondary outcomes. 2. In a trial involving 38 women, a comparison between vaginal misoprostol and intravenous oxytocin was prematurely halted due to a uterine rupture in one woman who received misoprostol (RR 3.67, 95% CI 0.16 to 84.66) and uterine dehiscence in another. Unfortunately, no additional outcomes, including GRADE outcomes, were reported in the trial. 3. In a trial involving 200 women, comparing vaginal PGE2 pessary to vaginal PGE2 tablet showed no significant disparity in c-sec rates (RR 1.09, 95% CI 0.74 to 1.60, very low-quality evidence) and other reported secondary outcomes.

Conclusion. This review on VBAC labor induction methods prioritizes safety for both mother and fetus. While trials offer insights into induction agents, data gaps, particularly in critical outcomes like achieving vaginal delivery within 24 hours and assessing uterine hyperstimulation, underscore the need for more research and standardized reporting to advance evidence-based practices.