

Are There Differences between Women who Choose Elective Repeat Caesarean Versus Trial of Labour in St. John's, NL?



P. Groves

Paul Groves, MD;¹ Joannie Neveu, MD;¹ Colleen Cook, MD;¹ Phil Murphy, MSc;^{1,2,3}
Joan M. G. Crane, MD¹

¹Department of Obstetrics and Gynecology, Eastern Health, Memorial University of Newfoundland, St. John's, NL

²Perinatal Program Newfoundland and Labrador, Eastern Health, St. John's, NL

³Department of Pediatrics, Eastern Health, Memorial University of Newfoundland, St. John's, NL

Abstract

Objectives: To compare the demographic and clinical characteristics between women who chose elective repeat Caesarean section (ERCS) versus trial of labour after Caesarean section (TOLAC) in St. John's, Newfoundland and Labrador (NL).

Methods: We conducted a retrospective case control study of women with live singleton gestations delivering at term in St. John's, NL between January 1, 2001 and December 31, 2014. Inclusion criteria were women who had a previous single lower segment Caesarean section (LSCS). TOLAC, successful TOLAC, and VBAC rates were calculated. Demographic and clinical characteristics were compared between women who chose ERCS versus TOLAC. Univariate analyses and multiple logistic regression analyses were performed, and adjusted odds ratios (aOR) and 95% CIs were calculated.

Results: A total of 1579 women were included, of whom 160 (10.1%) chose TOLAC, with 107 resulting in successful VBAC (67% successful TOLAC rate). The overall VBAC rate was 6.8%. Women who chose ERCS compared with those who chose TOLAC were more likely to be obese (aOR 3.20, 95% CI 1.85–5.54, $P < 0.001$), less likely to have had GA at delivery greater than 40 weeks (aOR 0.13, 95% CI 0.08–0.21, $P < 0.001$), less likely to have had a previous vaginal delivery (aOR 0.40, 95% CI 0.20–0.80, $P < 0.001$), and less likely to have had the previous CS for breech presentation (aOR 0.51, 95% CI 0.33–0.80, $P = 0.003$).

Conclusions: The overall TOLAC and VBAC rates in St. John's are low when compared with reported national rates. The successful TOLAC rate is within the expected range reported in the literature. Differences exist between women who chose ERCS compared with TOLAC.

Key Words: Trial of labour after Caesarean, vaginal birth after Caesarean, elective repeat Caesarean, success, choice

Corresponding Author: Dr. Paul Groves, Department of Obstetrics and Gynecology, Eastern Health Health Sciences Centre, St. John's, NL. paul.groves@mun.ca

Competing interests: None declared.

Received on July 27, 2017

Accepted on October 10, 2017

Résumé

Objectifs : Comparer les caractéristiques démographiques et cliniques des femmes qui choisissent de subir une césarienne itérative planifiée (CIP) à celles des femmes qui optent pour un essai de travail après césarienne (TOLAC) à St. John's (Terre-Neuve-et-Labrador).

Méthodologie : Nous avons mené une étude cas-témoin rétrospective sur des femmes enceintes d'un seul bébé ayant accouché à terme à St. John's entre le 1^{er} janvier 2001 et le 31 décembre 2014. Pour être admissibles, les femmes devaient avoir préalablement subi une seule césarienne du segment inférieur. Nous avons calculé les taux de TOLAC et de TOLAC réussis donnant lieu à un AVAC, et comparé les caractéristiques démographiques et cliniques des femmes ayant choisi la CIP à celles des femmes ayant opté pour le TOLAC. Nous avons ensuite effectué des analyses univariées et des analyses de régression logistique multiple, et calculé les rapports de cotes ajustés (RCA) et les intervalles de confiance (IC) à 95 %.

Résultats : L'étude a porté sur un total de 1579 femmes. Parmi elles, 160 (10,1 %) avaient opté pour le TOLAC, dont 107 avaient eu un AVAC réussi (taux de réussite : 67 %). Le taux global d'AVAC était de 6,8 %. Comparativement aux femmes qui avaient opté pour le TOLAC, celles qui avaient choisi la CIP étaient plus susceptibles d'être obèses (RCA : 3,20; IC à 95 % : 1,85–5,54; $P < 0,001$) et étaient moins susceptibles d'avoir un âge gestationnel supérieur à 40 semaines à l'accouchement (RCA : 0,13; IC à 95 % : 0,08–0,21; $P < 0,001$), d'avoir préalablement subi un accouchement par voie vaginale (RCA : 0,40; IC à 95 % : 0,20–0,80; $P < 0,001$) et d'avoir subi leur césarienne antérieure en raison d'une présentation par le siège (RCA : 0,51; IC à 95 % : 0,33–0,80; $P = 0,003$).

Conclusions : Les taux globaux de TOLAC et d'AVAC sont plus faibles à St. John's qu'ailleurs au pays. Le taux de TOLAC réussis correspond aux valeurs signalées dans la littérature. Des différences ont été observées entre les femmes qui choisissent la CIP et celles qui optent pour le TOLAC.

Copyright © 2017 The Society of Obstetricians and Gynaecologists of Canada/La Société des obstétriciens et gynécologues du Canada. Published by Elsevier Inc. All rights reserved.

J Obstet Gynaecol Can 2018;■■(■■):■■–■■

<https://doi.org/10.1016/j.jogc.2017.10.021>

INTRODUCTION

CS rates are trending up across Canada with the average rate increasing from 21.4% in 2000 to 27.5% in 2014.¹ In Newfoundland and Labrador specifically, the CS rate has been consistently higher than the Canadian average and also increased from 25.5% to 29.8% over the same time period.¹ The reasons for increasing CS rates are multifactorial.^{2,3} One suggested contributing factor is lower rates of trial of labour after CS and resulting lower vaginal birth after CS rates.³ The average VBAC rate in Canada has decreased from 35% in 1997–1998³ to 17.5% in 2011–2012.⁴ This reduction came after increasing reports of uterine rupture-related maternal and perinatal morbidity associated with TOLAC in North America.⁵ More recently, some argue that the promotion of VBAC alone in appropriate candidates could help reduce CS rates.³

The current national guideline on VBAC encourages a trial of labour for women with one previous CS and no contraindications to vaginal delivery after appropriate discussion of maternal and perinatal risks. The rate of successful TOLAC ranges from 50% to 85%.⁵ A number of patient characteristics have been associated with the likelihood of successful TOLAC.^{6–8} Models combining some of these factors have been developed to predict likelihood of VBAC and help clinicians select and counsel appropriate candidates for a trial of labour. One specific model, the Grobman nomogram,⁹ has been validated in a Quebec population.¹⁰ This model uses specific antenatal factors including maternal age, BMI, ethnicity, history of any previous vaginal delivery or vaginal delivery since last CS, and indication of prior CS to calculate a percent likelihood of VBAC. Other studies evaluating this calculator consider a score of 70% or above as identifying favourable candidates for a TOLAC.¹¹

A number of factors that may influence a woman in her choice for delivery route following a previous CS have been identified. Some of these include health care provider type and their opinion, personal experience, maternal age and BMI, and history of previous spontaneous vaginal delivery.^{11,12} Recognizing these factors could potentially help identify women who may benefit from extra discussion towards ap-

propriate selection of TOLAC and ultimately increase TOLAC and VBAC rates. Canadian studies have reported the TOLAC rates varying from 36.6% to 81.1%.^{10,13}

The primary objective of this study was to identify potential differences in demographic and clinical characteristics between women choosing elective repeat Caesarean section compared with those choosing TOLAC in St. John's, Newfoundland and Labrador. Secondary objectives included determining the TOLAC and VBAC rates at our centre and investigating the potential usefulness of the Grobman nomogram in our population. Insight gained through these objectives could potentially help develop strategies to increase TOLAC and VBAC rates and therefore decrease the CS rate at our centre.

METHODS

We performed a retrospective case control study of women with live singleton gestations delivering at term in St. John's, NL between January 1, 2001 and December 31, 2014, identifying women using the Perinatal Program Newfoundland and Labrador database. This computerized database collects information on pregnancy outcomes for several regions in NL. Data collected include demographic information, antenatal, intrapartum and postpartum events, and perinatal outcomes for deliveries of at least 20 weeks gestation. Quality assurance and data quality are ensured through the PPNL database's routine edit checking process on all extracted data. Inclusion criteria were women who had a previous single lower segment Caesarean section. Women were excluded if they had a stillbirth, delivered before 37 weeks gestation, or had any contraindication to vaginal delivery (including breech or other non-cephalic presentation, placenta or vasa previa, previous inverted T or classical CS, previous myomectomy or other uterine surgery, large for GA [estimated fetal weight greater than 4.5 kg in women with diabetes or greater than 5.0 kg in women without diabetes], and active herpes simplex). The final sample size was dictated by the number of deliveries at the study centre that met inclusion criteria in the given study timeframe.

Maternal and clinical characteristics were described and compared between women who chose ERCS and those who chose TOLAC. Variables evaluated included maternal age, pre-pregnancy BMI, birth weight, GA at delivery, history of previous vaginal delivery, history of previous spontaneous abortion, indication for the primary Caesarean section, previous induction of labour, history of gestational diabetes, pre-existing diabetes, gestational hypertension, pre-existing hypertension, or other medical conditions (including asthma, inflammatory bowel disease, thyroid disease, or

ABBREVIATIONS

ERCS	elective repeat Caesarean section
GA	gestational age
NL	Newfoundland and Labrador
PPNL	Perinatal Program Newfoundland and Labrador
SVD	spontaneous vaginal delivery
TOLAC	trial of labour after Caesarian section

Download English Version:

<https://daneshyari.com/en/article/8781535>

Download Persian Version:

<https://daneshyari.com/article/8781535>

[Daneshyari.com](https://daneshyari.com)