Castor oil as a natural alternative to labor induction: A retrospective descriptive study

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Abstract

Background: Castor oil is a common and natural alternative to pharmacological labor induction techniques. The purpose of this study was to describe the outcomes of women who consumed castor oil to induce labor. **Methods:** A retrospective clinical chart review was conducted of all women who received prenatal care at a birth center located in the southeastern United States and consumed castor oil (n=323) to induce labor between January 2008 and May 2015. De-identified data from birth logs and electronic medical records were entered into SPSS Statistics 22.0 for analysis. Descriptive statistics were analyzed for trends in safety and birthing outcomes. **Results:** Of the women who utilized castor oil to stimulate labor, 293 (90.7%) were enabled to birth vaginally at the birth center or hospital. The incidence of maternal adverse effects was less than 7%, and adverse effects of any kind were reported in less than 15% of births. While independent sample t-tests revealed that gestational age (p=.26), woman's age (p=.23), and body mass index (p=.28) were not significantly associated with ability to successfully give birth at the birth center, parous women were more likely to birth at the birth center after using castor oil than their nulliparous counterparts (p<.01). **Discussion:** Nearly 90% of women in the study who consumed castor oil to induce labor were able to give birth vaginally. Findings indicate further research is needed to compare the safety and effectiveness of natural labor induction methodologies, including castor oil, to commonly used labor induction techniques in a clinical trial.

Purpose

The purpose of this study was to describe the outcomes of women who consumed castor oil to induce labor.

Methods

May-July 2015

Data Collection/Study Population

- Retrospective clinical chart review of 1,606 CBP patients from January 2008-May 2015
- Two Qualtrics web-based surveys: one for data from birth logs and another for EMR
- 323 completed surveys for women using castor oil

July-August 2015

Data Analyses

- Descriptive statistics to analyze participant demographics and survey categories
- t-test to determine relationship between castor oil and labor induction

Conclusions

- Incidence of both maternal and fetal side effects were rare
- Nearly 91% of women in the study who received castor oil were able to give birth vaginally

Implications

- Findings indicate further research is needed to compare the safety and effectiveness of castor oil to commonly used labor induction techniques
- Women should be educated with medically accurate information regarding castor oil's use as a method of labor induction
- Castor oil appears to be a promising labor induction method, which may prove an effective alternative to empower women to birth naturally and avoid negative birthing outcomes

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Results

Table 1: Descriptive information

	N=323
Maternal Age (years)	29.0±4.3
Maternal BMI (kg/m²)	25.0±4.8
Parity	0.9±1.1
Cervical Dilation Upon Admission (cm)	5.3±1.8
Gestational Age (weeks)	40.2±1.3
Note: Data reported as Mean±Standard Deviation	

Table 2: Maternal effects and birth outcomes of the entire sample who consumed castor oil

	Entire Sample (N=323)
Maternal Adverse Effects	
Nausea	7 (2.2%)
Vomiting	3 (0.9%)
Hemorrhage	3 (0.9%)
Diarrhea	1 (0.3%)
Fever >100.5	1 (0.3%)
Other	9 (2.8%)
Other Methods of Labor Stimulation	
AROM	48 (14.9%)
Cook	10 (3.1%)
Herbs	32 (9.9%)
Nipple Stimulation	21 (6.5%)
Sweep	6 (1.9%)
Oxytocin	12 (3.7%)
Membrane Rupture	
Artificial	78 (24.1%)
Premature	7 (2.2%)
Spontaneous	219 (67.8%)
Prolonged	1 (0.3%)
En Cul	9 (2.8%)
Fetal/Newborn Adverse Effects	
Precipitous Birth	6 (1.9%)
Evidence of Meconium	5 (1.5%)
Other Adverse Effects	13 (4.0%)
Complication-Prolonged Rupture of Membrane	26 (8.0%)
Type of Birth	
Cesarean Birth	30 (9.2%)
Vaginal	293 (90.7%)
Forceps	1 (0.3%)
Vaginal Birth after Cesarean Birth (VBAC)	4 (1.2%)
Water Birth	213 (65.9%)
Length of Labor	
Stage 1 (hours)	8.6±5.8
Stage 2 (hours)	1.5±1.4
Stage 3 (minutes)	11.2±5.4
Fetal Birth Weight (lbs)	7.9±1.1
Apgar Score	9.0±0.3
7	2 (0.6%)
8	19 (5.9%)
9	288 (89.2%)
10	11 (3.4%)
Note: Data are listed as n(%) or M±SD	

Acknowledgements
The authors would like to acknowledge the Charleston Birth Place for their partnership and collaboration and the Honors College at the College of Charleston for their student grant assistance. The authors thank Kate Carmody and Kristin Linesch for their assistance with data collection.