



ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

EFFECT OF CASTOR OIL ON GRAVIDA OF PREGNANT WOMEN WHEN USED AS A LABOUR INDUCTION AGENT

KEY WORDS:

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ABSTRACT

Labour is an inevitable consequence of Pregnancy. Only two events can prevent the onset of labour once pregnancy has become well established – the death of the undelivered mother or surgical removal of the fetus Castor oil is a herbal preparation that has been used for induction of labor from ancient Egypt until now.⁴

Castor oil is regarded as a uterine stimulant and irritant laxative

AIMS AND OBJECTIVES: EFFECT OF CASTOR OIL ON GRAVIDA OF PREGNANT WOMEN WHEN USED AS A LABOUR INDUCTION AGENT

MATERIAL AND METHODS: 190 Patients admitted to labour ward of OBG Dept of MDM Hospital with an indication for induction of labour. from MARCH 2019 to SEPTEMBER 2019

Method of Induction: This is a hospital based observational study which was conducted at Dr S N Medical College, Jodhpur, Rajasthan by evaluating the women who were admitted in our hospital (MDMH) for delivery.

After informed consent had been obtained, the patients selected for the study were evaluated

Castor oil was administered in 2 doses form in 18-24hrs interval and every given dose is 50 ml (47.75gm) in 200 ml of warm milk. Antiemetic drug was given 30 minutes prior to administered castor oil to minimize nausea and vomiting

RESULTS: 74 (71.15%) out of 104 multigravida women were successfully induced by castor oil. Among primigravida women 36 (41.86%) out of 86 were successfully induced by castor oil. there were total 86 primigravida in the study population and out of this 66 women has normal vaginal delivery 20 primigravida women who had caesarean section. there were total 104 multigravida in the study population, out of this 89 women has normal vaginal delievery

CONCLUSION: Castor oil is stable at room temperature and does not need refrigeration. Induction delivery interval, requirement of Oxytocin augmentation is less in castor oil user. Vaginal delivery rate is high in castor oil user those use castor oil as a labour inducing agent.

INTRODUCTION

Labour is an inevitable consequence of Pregnancy. Only two events can prevent the onset of labour once pregnancy has become well established – the death of the undelivered mother or surgical removal of the fetus.

there are different methods of induction (mechanical, surgical and pharmaceutical) to prevent prolonged pregnancy,^{1,2} but there is no safe method yet without any maternal and fetal complications. Due to the different side effects of chemical drugs, physicians now a days recommend herbal preparations.³ Castor oil is a herbal preparation that has been used for induction of labor from ancient Egypt until now.⁴

Castor oil is regarded as a uterine stimulant and irritant laxative.

AIMS AND OBJECTIVES

Effect Of Castor Oil On Gravida Of Pregnant Women When Used As A Labour Induction Agent

MATERIAL AND METHODS

190 Patients admitted to labour ward of OBG Dept of MDM Hospital with an indication for induction of labour. from MARCH 2019 to SEPTEMBER 2019

Indications For Induction

1. Pregnancy Induced Hypertension
2. Premature Rupture of membranes
3. Abruption placentae
4. Chorioamnionitis
5. Suspected
 - Absence of fetal well – being
 - IUGR
 - Postterm pregnancy
 - Isoimmunization
6. Maternal medical problems
 - Diabetes mellitus
 - Renal disease

- Chronic pulmonary disease
- Cardiac disease

7. Fetal demise
8. Logistic factors

Contraindications For Induction

1. Major degree of cephalo – pelvic disproportion and contracted pelvis.
2. Placenta praevia or vasa praevia.
3. Prior classical caesarean
4. Pregnancy following repair of Vesicovaginal fistula /Rectovaginal fistula /CPT
5. Malpresentation.
6. invasive cervical carcinoma

Method of Induction:

This is a hospital based observational study which was conducted at Dr S N Medical College, Jodhpur, Rajasthan by evaluating the women who were admitted in our hospital (MDMH) for delivery.

After informed consent had been obtained, the patients selected for the study were evaluated. Castor oil was administered in 2 doses form in 18-24hrs interval and every given dose is 50 ml (47.75gm) in 200 ml of warm milk. Antiemetic drug was given 30 minutes prior to administered castor oil to minimize nausea and vomiting

DISCUSSION & OBSERVATION

Table 1 Distribution of the women according to Parity (n=190)

Gravida	Successfully Induced	Successfully Not induced
Primigravida (n=86)	36 (41.86%)	50 (58.13%)
Multi gravida (n=104)	74 (71.15%)	30 (28.84%)
Total	110	80

Chi square 16.57, P value <0.0001 (Sig.)

Parity was compared in both groups and it was found that majority of the women who were successfully induced with castor oil were multigravida with statistical significance (P<.0001).

From the above table it is seen that 74 (71.15%) out of 104 multigravida women were successfully induced by castor oil. Among primigravida women 36 (41.86%) out of 86 were successfully induced by castor oil. Therefore it is observed that castor oil is more effective in multigravida as an inducing agent for labour with statistical significance ($P < .0001$).

Table 2 Distribution of women according to normal delivery in primigravida stratified by favourability of the cervix at the initial and subsequent vaginal examination (n=66)

Vaginal examination	Normal delivery n (%)	
	Less favourable	More favourable cervix ≥ 5
Initial vaginal examination	38(57.57%)	28 (42.42%)
Following castor oil ingestion	7(10.60%)	25(37.87%)

Chi square 11.06, P value 0.0009 (Sig.)

As shown in the above table there were total 86 primigravida in the study population and out of this 66 women has normal vaginal delivery. The above table shows that out of 66 women who delivered normally 38 (57.57%) had less favourable cervix < 5 and 28 (42.42%) had more favourable cervix. Among those women with less favourable cervix 7 (10.60%) were successfully induced following castor oil administration and women with more favourable cervix 25(37.87%) were successfully induced with castor oil.

This shows that castor oil is more effective in women with favourable cervix with statistical significance

Table 3 Distribution of women according to caesarean section in primigravida stratified by favourability of the cervix at the initial and subsequent vaginal examination (n=20)

Vaginal examination	Caesarean section n (%)	
	Less favourable cervix < 5	More favourable cervix ≥ 5
Initial vaginal examination	14(70%)	6(30%)
Following castor oil ingestion	12(60%)	4(20%)

Chi square 0.110, P value 0.739 (Nit Sig.)

The above table shows that amongst 20 primigravida women who had caesarean section. Out of this 14 (70%) had less favourable cervix and 6 (30%) had more favourable cervix at the initial vaginal examination.

Amongst these 12 women were successfully not induced following castor oil administration and women with more favourable cervix (6), 4 were successfully not induced with castor oil.

This shows that castor oil is not effective in women with less favourable cervix in primigravida and caesarean section common in less favourable cervix.

Table 4 Distribution of women according to normal delivery in multigravida stratified by favourability of the cervix at the initial and subsequent vaginal examination (n=89)

Vaginal examination	Normal delivery n (%)	
	Less favourable cervix < 5	More favourable cervix ≥ 5
Initial vaginal examination	40 (38.46%)	49 (47.11%)
Following castor oil ingestion	19 (18.26%)	47 (45.19%)

Chi square 4.196, P value 0.040 (Sig.)

As shown in the above table that there were total 104 multigravida in the study population, out of this 89 women has normal vaginal delivery. The above table shows that out of 89 women who delivered normally 40(38.46%) had less favourable cervix < 5 and 49 (47.11%) had more favourable cervix. Amongst those women with less favourable cervix 19(18.26%) were successfully induced following castor oil administration and women with more favourable cervix that is 49(47.11%), 47(45.19%) were successfully induced with castor oil.

This shows that castor oil is more effective in women with favourable cervix in multigravida with statistical significance. ($p = 0.04$)

RESULTS

74 (71.15%) out of 104 multigravida women were successfully induced by castor oil. Among primigravida women 36 (41.86%) out of 86 were successfully induced by castor oil. there were total 86 primigravida in the study population and out of this 66 women has normal vaginal delivery 20 primigravida women who had caesarean section. there were total 104 multigravida in the study population, out of this 89 women has normal vaginal delivery

CONCLUSION

Castor oil is stable at room temperature and does not need refrigeration. Induction delivery interval, requirement of Oxytocin augmentation is less in castor oil user. Vaginal delivery rate is high in castor oil user those use castor oil as a labour inducing agent.

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