Women’s Satisfaction in Early versus Delayed Post caesarean (Under Spinal Anaesthesia) Feeding: An Randomized Controlled Trial at Tertiary Care Center Jaipur Rajasthan.

Mukesh Kumar Swami¹, Lata Rajoria², Pushpa Nagar³, Nidhi Goyal⁴, Prachi Gupta⁵, P. Soumya Singh⁶

¹, ⁴, ⁵, ⁶Resident Doctor, ²Sr. professor and head, ³Sr. professor
Department Of Obst. & Gynae, SMS Medical College, Jaipur

Correspondence Author: Mukesh Kumar Swami, Resident Doctor, Department Of Obst. & Gynae, SMS Medical College, Jaipur, Rajasthan

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Abstract

Background: The early postoperative feeding after caesarean section (C-section) has remained controversial. This study was designed to evaluate the effect of early postcaesarean feeding on patient postoperative satisfaction after discharge.

Methods: Longitudinal interventional study (Randomized controlled trial) was conducted from 16th March 2016 to 30th June 2017 in Department of Obstetrics and Gynecology, SMS Medical College and Attached Group of Hospital, Jaipur.

Results: Woman satisfaction (VAS Score) during post-operative In early feeding group (case) was 6.75±2.02cms compared to delay feeding group (control) was 4.1±2.24cms. (p value = 0.001).

Conclusion: The results of this study suggest early postcaesarean feeding because woman satisfaction (VAS Score) during post-operative early feeding group (case) was better than delay feeding group (control).

Key Words: Caesarean section, Satisfaction, Feeding.

Introduction

Caesarean section rates are increasing worldwide, albeit unequally: a recent analysis of Demographic and Health Survey (DHS) data in 26 South Asian and sub-Saharan African countries found that rates were highest among the ‘urban rich’ in all countries, and lowest among the ‘rural poor’ in 181 probably, this is the most common major abdominal surgery. Its incidence has been quoted at 13–39%. It is as high as 50% in certain private settings, and China has been cited as having the highest rates of Caesarean Section in the world². According to the World Health Organization³, its acceptable incidence should be 5–15%, but the previous recommendation of 15% Caesarean Section rate was withdrawn in June 2010. Recently, some studies have shown that early postoperative oral feeding after C-section does not enhance gastrointestinal complications⁴,⁵. Reduction in the duration of hospitalization in order to diminish the costs of therapy and improving the rotation of hospital beds associated with minimum global health threatening is the goal of contemporary surgeries. One of the main concerns of any woman surgeon is the earlier return of the patients to normal feeding habits after caesarian section. This study was designed to evaluate the effect of early postcaesarean feeding on patient postoperative satisfaction after discharge.

Material and Methods

Type of Study
Interventional study (Randomized controlled trial).

Study Design
Longitudinal.

**Duration Of Study**

16th March 2016 till 30th June 2017 for sample size is reached for data collection and 2 months for data analysis and compilation.

**Place of Study**

Department of Obstetrics and Gynecology, SMS Medical College and Attached Group of Hospital, Jaipur.

**Study Universe**

Women undergoing caesarean section in the Department of Obstetrics and Gynecology, SMS Medical College and Attached Group of Hospital, Jaipur.

**Inclusion Criteria**

1. All women undergoing lower segment caesarean section with uncomplicated surgery and with normal intra-operative finding under spinal anaesthesia
2. Woman willing to give consent and participate in the study

**Exclusion Criteria**

History of any major abdominal surgeries in the past:
- Women with pre-existing gastrointestinal disorders such as acid peptic disease, hiatus hernia, irritable bowel syndrome, liver pathology, gall bladder pathology, severe anaemia, any sign of sepsis, preeclampsia/eclampsia, DIC, any neurological disorder or on drugs that cause sedation.
- Woman requiring general anesthesia in addition to spinal anesthesia.
- Woman who have any intra-operative complication or associated surgery
- Occurrence of PPH.

**Methodology**

- Women undergoing caesarean section will be selected on the basis of inclusion and exclusion criteria.
- Informed consent of the patient will be taken prior to study. Ethical committee approval will also be taken.
- Randomization will be done to allocate women in each group.
- Spinal anesthesia will be given to all the women with hyperbaric bupivacaine in a dose of 10mg in 2ml solution.
- Satisfaction rates of our patients were evaluated with visual analogue scale (VAS). It has also been accepted as a tool to measure quality of life. A VAS ranging from zero to 10 was selected to represent the postoperative satisfaction level. The zero on the ruler was aligned with the lack of satisfaction and ten represented full satisfaction. Accordingly, the observed categories were collapsed into a 1-10 rating scale.

**Observations and Results**

Table No.1: Age Wise Distribution

<table>
<thead>
<tr>
<th></th>
<th>Age (yrs)</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case</td>
<td>22.17</td>
<td>2.08</td>
</tr>
<tr>
<td>Control</td>
<td>22.52</td>
<td>1.45</td>
</tr>
<tr>
<td>P-value</td>
<td>0.0385</td>
<td></td>
</tr>
</tbody>
</table>

Above table shows distribution according to Age. In early feeding group (case) average age 22.17±2.08 years compared to delay feeding group (control) 22.52±1.45; p value=0.0385.
Table No.2 : Weight Wise Distribution

<table>
<thead>
<tr>
<th></th>
<th>Weight</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case</td>
<td>55.55</td>
<td>3.96</td>
</tr>
<tr>
<td>Control</td>
<td>55.75</td>
<td>3.68</td>
</tr>
<tr>
<td>p-value</td>
<td>0.462</td>
<td></td>
</tr>
</tbody>
</table>

Above table shows distribution according to weight. In early feeding group (case) average weight 55.55±3.96 kg compared to delay feeding group (control) 55.75±3.68 kg; p value=0.462.

Table No. 3: Gestational Age wise Distribution

<table>
<thead>
<tr>
<th></th>
<th>Gestational Age (wks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case</td>
<td>39 (38-40)</td>
</tr>
<tr>
<td>Control</td>
<td>39 (38-40)</td>
</tr>
</tbody>
</table>

Above table show gestational wise distribution. In both early feeding group (case) average and delay feeding group (control) average gestational age (in weeks) was 39.

Table No. 4 : Woman satisfaction wise distribution

<table>
<thead>
<tr>
<th></th>
<th>Woman Satisfaction</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case</td>
<td>6.75</td>
<td>2.02</td>
</tr>
<tr>
<td>Control</td>
<td>4.1</td>
<td>2.24</td>
</tr>
<tr>
<td>p-value</td>
<td>0.001</td>
<td></td>
</tr>
</tbody>
</table>

Above table shows distribution according to woman satisfaction (VAS Score) during post-operative. In early feeding group (case) 6.75±2.02cms compared to delay feeding group(control) 4.1±2.24cms;p value = 0.001.

**Discussion**

In our study we included 80 post caesarean women divided in two groups early oral fed and delayed oral fed. In both the groups, we compared the time to return of bowel function (i.e., bowel sounds, passing flatus, time to bowel evacuation) and gastrointestinal complications (nausea, vomiting, abdominal distention diarrhea and ileus), hospital stay and woman satisfaction. In early fed group (case) average age was 22.17 ± 2.08 years compared to delayed fed group (control) 22.52 ± 1.45; p value = 0.0385. In both case and control group belongs to average age 21 to 25 years because this age group represents the most fertile and reproductive age group.

This fact is comparable to studies of S. Suganya Devi et al (2015) in the study group, 73.8% of women were between 20-30 years.26.2% of the women were between 30-40 years. In the control group, 71.6% were between 20-30 years and 28.2% were between30-40 years.

80% of Early fed group (case) belong to Hindu religion whereas 20% belong to Muslim religion and delayed fed group(control) 70% of enrolled women were belong to Hindu religion.

In the present study, average weight in early fed group (case) was 55.55 ± 3.96 kg compared to delayed fed group (control) 55.75 ± 3.68 kg; p value=0.462.

In the study of Teoh WHL et al (2007) in EOF group Weight (kg) 68.6 (10.6) compared to DOF group 71.5 (10.4).

In the present study, average gestational age of enrolled women were 39 weeks in both the groups as compared to the study by Teoh WHL et al (2007) in both group gestation (weeks) 38 (37–38) . Also S. Suganya Devi et al (2015) found the early fed group the mean gestational age was 37.70 weeks with the standard deviation of 1.617. In the conventional fed group, the mean gestational age was 37.88weeks with the standard deviation of 1.331.

In the present study,distribution according to woman satisfaction (VAS Score) during post-operatively in early fed group (case) 6.75±2.02 cms compared to delayed fed group(control) 4.1± 2.24 cms; p value=0.001.

Many studies support this observation such as Sumitra Mehta et al (2010) showed that mean satisfaction score was much higher in the early fed group than in the later-fed group (89.6 ± 6.1 versus 49.7 ± 7.5mm). Minoo Yaghmaei et al (2010) also concluded a higher satisfaction rate (p <0.0001) in the early fed group.
Izbizky GH et al (2008)\(^1\) showed that the woman's satisfaction (mean VAS ± SD) was similar in both groups; 73 ± 17 mm in the delayed fed group and 77 ± 13 mm in the early fed group (P=0.12).

**Conclusion**

The results of this study suggest early postcesarean feeding because woman satisfaction (VAS Score) during post-operative early feeding group (case) was better than delay feeding group (control).

**References**