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Audit to Assess the Implementation of Early First Feeding in Newborns after Caesarean Delivery

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Background

Current National and International [1-3] guidelines strongly recommend initiating breastfeeding (BF) within one hour of birth. The advantages of initiating BF early are establishment of successful lactation and giving first milk or colostrum which is advantageous to the baby. In addition, a study from Ghana showed that by initiating BF within one hour of birth, 22.3% of all neonatal deaths could be prevented [4]. Another epidemiological study had documented a causal association between early BF and infection related mortality in the NB [5].

Whereas initiation of BF is carried out by and large, within an hour after vaginal birth, it is not the same after a Caesarian Delivery (CD). BF may be delayed after CD due to various reasons. One of the often quoted reasons is that after LSCS, women are not conscious within an hour after general anaesthesia (GA), or, even if regional anaesthesia was employed, they were over sedated and unable to breastfeed effectively. Most CDs are carried out under regional anesthesia. GA is used only for specific situations where regional anethesia is contraindicated, as with low platelet count in pre eclampsia or with heavy bleeding being anticipated as in major degree Placenta previa. BF should be commenced within the hour with the same fervour in post LSCS women as in women after vaginal delivery.

Audit Scope

Early initiation of BF can decrease infection related neonatal mortality and establish lactation successfully. This audit was done to assess BF practice in post LSCS mothers in this tertiary level teaching hospital with scope for improving the practice.

Aim

To assess the implementation of early first BF in the NB after CD in a tertiary level, teaching hospital of South India.

Objective

To determine the time between CD and the first BF in eligible newborns in the maternity wards

Material and methods

Setting

Maternity ward, Christian Medical College and Hospital, Vellore

Period

5 days, from 25 Sep-2012 to 29 Sep -2012.

Inclusion criteria

1. NB born by CD

2. Both mother and NB shifted to postnatal ward after delivery.

Exclusion criteria

1. NB shifted to nursery for neonatal complication.

2. Mother with any morbidity that requires close monitoring in the ICU (severe pre eclampsia/ eclampsia, post-partum bleeding)

3. Mothers who had stillbirths

All eligible babies, were Included in this audit. The time of first BF after birth was obtained from the nurse's record and cross checked with the mother.

Results

General Characteristics: The total number of CDs during the 5 day period was 61 and the number of babies shifted to the mothers side was 49 (80.23%). Twelve of the NB was not included in the audit as they were not shifted to the mother side because of a neonatal complication. None of the mothers included in the audit had any exclusion criteria. The mean birthweight was 2909.4 g, 45 of them were term and 4 were preterm. There were more male NB than females (20 female-40.8% and 29 males -59.2%) (Figure 1).

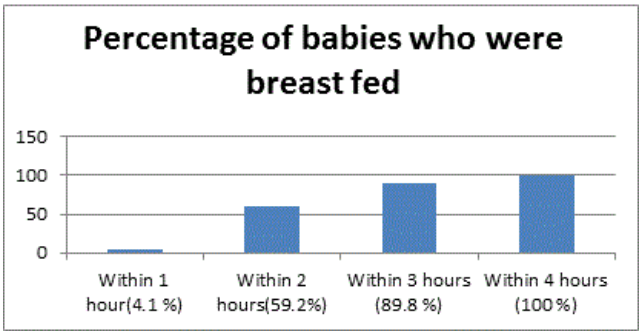

Figure 1: Percentage of breast feeding babies.

Most of the women were in the General Ward 41 (83.67%) and only 8 (18.36%) were in the Private ward. The average timing of the first BF

following CD was 123.4 ± 36.4 minutes, the range being 58 to 225 minutes.

Only 4.1% commenced first BF within the first hour. Within the first 2 hours, 59% had first BF. While it took 4 hours to for 100% first BF, 89.8% had first BF by 3 hours after CD.

Discussion

In this audit we have found that only 4.1% of mothers who had LSCS had started breast feeding during the first hour of life. As per publication by The Ministry of Women and Child Development in 2004, 15.8% of mother had initiated BF within 1 hour in India [2]. In a study conducted by Radhakrishnan and Balamuruga in rural women in Tamil Nadu, 60.5% of women had started breastfeeding within half an hour after birth [6]. According to the National Family and Health Survey - 3, 23.4% of mother had initiated breastfeeding within 1 h after birth [7]. In all the above quoted studies, all births were included. None of the studies had categorised CD, where first BF is even further delayed.

The current data showed that all mothers had started breastfeeding within 4 hours of life and approximately 90% within 3 hours. This is good when compared with the study conducted on rural women in Tamil Nadu [6] where only 72% of the mothers had initiated BF within 4 hours. In another study by Ranjana et al., the percentage of mothers who had initiated BF within the first six hour was only 70% [8].

Conclusion

Following CD, all the mothers had initiated BF within the first four hours of birth, but only 4.1% of mothers did it in the first hour, as is recommended. This important aspect has been neglected by both the Obstetricians and the Pediatricians in this teaching hospital. The reasons for this could be that the Faculty are caught up with looking after High Risk Mothers and their NB. Another reason that could be attributed is that the subject of BF belongs to both the Obstetrician and the Neonatologist. In the long run, this will eventually lead to more neonates dying due to discontinuation of BF and neonatal infections as well.

The introduction of "care managers", as a bridge between the specialist and the patient may result in improvement of clinical parameters and better adherence to BF, just as the study by Ciccone et al. [9] demonstrated that the management of the diabetic patient by the introduction of a specialized nurse determines a better control of hyperglycemia, hypertension, and hyperlipidemia.

Recommendations

Postoperative ward nurses and doctors should have special refresher sessions to explain the importance of initiating early breastfeeding in new mothers.

These sessions should be repeated at regular intervals and audits should be repeated to monitor the improvement.

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