

Cesarean Delivery at Maternal Request in a Rural Medical College Hospital

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Abstract

Background: The aim of the study was to find out the reasons behind women preferring cesarean section (CS) in the absence of obstetric and medical indications.

Methods: This was a prospective study among women who came for delivery at R.L. Jalappa Hospital and Research Center, Kolar, a tertiary level teaching hospital. All women who underwent cesarean delivery for maternal request were included in this study.

Results: The total number of deliveries during the study period (1.5 years) was 3,639. There were 1,877 (52%) vaginal deliveries and 1,762 (48%) CSs. Among 1,762 cesarean deliveries, 44 (2.5%) had maternal request as their indication. Majority (54.5%) of them were in the age group of 20 - 25 years. Multigravida opted for CS more than primigravida (30 versus 14). Most (61.3%) of them have finished their primary school. Majority of them (56.8%) were in class IV socioeconomic status of Kuppuswamy's scale. The various reasons for women requesting cesarean delivery were refusal of vagina birth after cesarean section (VBAC), simultaneous tubectomy, painless delivery, prolonged infertility, afraid of neonatal outcome and astrological concerns.

Conclusion: Many of the women opted for cesarean delivery in our study for preventable reasons like painless labor and simultaneous tubectomy which would have been avoided by prior counseling starting from antenatal period and by providing labor analgesia. Proper education of the patient and personal involvement of the treating obstetrician in counseling the patient and her supporters can reduce cesarean delivery for maternal request.

Keywords: Cesarean delivery; Maternal request; Painless labor

Introduction

Cesarean delivery is defined as the birth of a fetus through

an incision on the abdominal wall and an intact uterus after 28 weeks of gestation. Its development and application has saved the lives of countless mothers and infants [1]. Nowadays, the incidence of cesarean delivery is steadily increasing both in developed and developing countries including India.

During the last 10 years, the cesarean section (CS) rates have gone up tremendously and this global phenomenon has gotten the professionals, the public and those who care for women's health worried. The WHO recommendations state that a CS rate greater than 15% is not justified. The major reasons for the continued increase in the cesarean delivery rates are use of electronic fetal monitoring during labor, rise in labor induction (failure leads to CS), decrease in vaginal breech delivery, fear of litigation and increased safety of surgery. Elective cesarean deliveries are increasingly being performed for a variety of reasons including concern for pelvic floor injury associated with vaginal birth, medically indicated preterm birth and patient request [1, 2].

One reason for the growing cesarean delivery rate is maternal request for cesarean delivery. Cesarean delivery on maternal request is defined as cesarean delivery performed at the request of the mother in the absence of any medical or obstetric indications [3, 4]. The reasons behind the phenomenon are complex and involve social and cultural aspects. Commonly cited reasons are fear of labor pain, uncertainty of outcome, fear of emergency intervention such as forceps, fetal distress in labor, future sexual dysfunction, stress incontinence or pelvic organ prolapse and patient's convenience [5].

An increasing number of surveys have investigated women's reason for CS, the ethics of doing such CS and whether proper counseling prior to the surgery will reduce the CS rate. A study published in 2006 comprising 86 pregnant women with fear of birth and a request for planned cesarean was referred for counseling and found that 86% changed their original request for CS and preferred to deliver vaginally [6].

Thus, the aim of this study was to find out the reasons behind women preferring CS in the absence of obstetric and medical indications.

Materials and Methods

We performed a prospective study in women who came for delivery at R.L. Jalappa Hospital and Research Center, Kolar, a tertiary level teaching hospital. All women who underwent cesarean delivery for maternal request were included in this study.

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Table 1. Demographic Details of the Patients Studied

Variables	No. of patients	Percentage
Age in years		
< 20	4	9
20 - 25	24	54.5
26 - 30	13	29.5
31 - 35	2	4.5
> 35	1	2.3
Parity		
Primigravida	14	31.8
Multigravida	30	68.1
Period of gestation (weeks)		
38 - 39	23	52.2
39 - 40	20	45.5
> 40	1	2.2
Patient education		
Illiterate	6	13.6
Primary school	13	29.5
Middle school	14	31.8
High school	4	9
Graduate	7	15.9
Socioeconomic status		
Class I	0	0
Class II	2	4.5
Class III	5	11.3
Class IV	25	56.8
Class V	12	27.2
Occupation		
Working	14	31.8

Inclusion criteria

All women who underwent CS for maternal request, both primigravida and multigravida, were included.

Exclusion criteria

CS performed for any obstetric or medical indications like contracted pelvis, cephalo pelvic disproportion, malpresentations, placenta previa, fetal distress, etc.

Total study period was from October 2011 to March 2013. Totally 44 women were included in this study. Among 44 women, 14 were primigravida and 30 were multigravida. The age of each woman, her education, occupation, parity and previous mode of delivery were recorded.

Women who opted for cesarean delivery were put through a questionnaire enquiring about the reason for opting cesarean

Table 2. Details of Previous Delivery and Indications for Prior Cesarean Delivery

Mode of delivery	No. of patients	Percentage
Vaginal delivery	11	25
Cesarean delivery	19	43.1
Indications for prior cesarean delivery		
Oligohydramnios	5	26.3
Fetal distress	5	26.3
Breech presentation	4	21
PROM	3	15.8
Placenta previa	2	10.5

delivery, the reason for not undergoing vaginal delivery, the pro and cons of both vaginal delivery and cesarean delivery that they know about, and any family member or friend who had influenced her regarding the mode of delivery.

All the data were analyzed. The total duration of hospital stay, development of maternal and perinatal complications, if any, were also analyzed.

Results

In this prospective study, a total of 44 women were included. Majority (54.5 %) of them were in the age group of 20 - 25 years. Multigravida opted for CS more than primigravida (30 versus 14). All were in term gestation when they underwent CS.

Most (61.3%) of them have finished their primary school. Majority of them (56.8%) were in class IV socioeconomic status of Kuppuswamy's scale.

Table 1 shows demographic data of all the patients studied and Table 2 shows details of previous delivery.

Among the multigravida who underwent CS for maternal request in the study group, 19 had previous CS and the rest 11 had prior vaginal delivery.

Among the 19 multigravida with previous cesarean delivery (not for recurrent indication), all were given the option of vaginal birth after cesarean delivery (VBAC). Ten women refused VBAC for the fear of complications and the rest nine refused the trial of labor as they wanted simultaneous tubectomy.

One woman who delivered vaginally before had bad obstetric history, and she lost her both children at the age of 3 - 4 years from infectious diseases. The details were not known.

There were three women with prior vaginal delivery who were not ready to tolerate the pain again and they also wanted simultaneous tubectomy along with CS provided the baby's condition was satisfactory. Four women came with history of reduced fetal movements who underwent cesarean delivery for the fear of losing their baby, in spite of normal cardiotocography and ultrasound reports. One woman refused as her age was 30 and she could not withstand vaginal delivery. Two women insisted for cesarean because they wanted baby extraction at a particular time due to astrological concerns.

Table 3. Various Reasons for Cesarean Delivery on Maternal Request

Reasons for cesarean delivery	No. of patients	Percentage
Primigravida		
Painless delivery	10	71
Prolonged infertility	3	21.4
Post dated with refusal of induction	1	7.1
Multigravida		
With previous cesarean section		
Refusal of VBAC	10	52.6
Need simultaneous tubectomy	9	47.3
With previous vaginal delivery		
Painless delivery	3	30
Afraid of neonatal outcome	4	40
Elder age (> 30 years)	1	10
Baby extraction at particular time (astrology concern)	2	20

Among primigravida 10 women underwent CS because they wanted painless delivery, three women were cases of prolonged infertility saying that they did not want to take risk, and one woman with post dated pregnancy refused induction of labor. Table 3 briefs the various reasons for cesarean delivery on maternal request.

Maternal and fetal complications found during the study are shown in Table 4. Following surgery, two women (with previous vaginal delivery) developed wound infection. The pus culture report of one woman showed no growth of organisms and the other one with methicillin-resistant *Staphylococcus aureus* infection. Both were treated with relevant intravenous antibiotics. One patient required secondary wound closure.

Every woman included in this study had their own opinion that cesarean delivery is the safest mode.

Discussion

The doctor-patient relationship is complex and private, requiring mutual respect and trust. The patient's right to refuse or limit treatment is well tested and universally acknowledged, but the opposite right to request certain interventions, while perfectly acceptable in many situations seems to have caused significant controversy with respect to CS [7].

The total number of deliveries during the study period (1.5 years) was 3,639. There were 1,877 (52%) vaginal deliveries and 1,762 (48%) CSs.

The CS rate is very high (48%). Our hospital is a tertiary rural referral center, receiving many patients who are handled outside and get admitted with features of obstructed labor and fetal distress.

Among 1,877 cesarean deliveries, 44 (2.5%) had maternal request as their indication. This incidence at our hospital is

Table 4. Maternal and Fetal Complications

Complications	No. of patients	Percentage
Maternal		
Wound infection	2	4.5
Fetal		
Birth asphyxia	2	4.5
Respiratory distress syndrome	2	4.5

similar to the data given by ACOG committee opinion number: 380, that 2.5% of all births in United States are CS for maternal request [8].

In our study, multigravida (68.1%) opted for CS more than primigravida (31.8%) based on their experience with previous child birth.

Among 19 (43.5%) multigravida, who had undergone primary CS for non-recurrent indications like oligohydramnios, fetal distress and placenta praevia were comfortable about the previous CS as they did not have any complications and refused to undergo trial of vaginal delivery. As many as nine (47.3%) wanted simultaneous tubectomy also.

Eleven women who delivered vaginally in previous pregnancy insisted for CS in the current pregnancy stating various reasons like painless delivery (30%), afraid of neonatal outcome (40%), elder age (10%) and astrology concerns (20%).

In our study, six women (13.6%) were uneducated. Women who studied only up to primary school level were 13 (29.8%). Fourteen (31.8%) women were educated up to middle school level. This is comparable to a study by Behague et al who found that CSs were more common among wealthy, educated women and those with more antenatal attendance [9].

In our study, 25 (56.8%) women were in lower socioeconomic status. The reason for this may be attributed to low education status in the community.

Two women in our study group had postoperative wound infection and one required secondary wound closure. The women who chose cesarean delivery are more satisfied by the result and complain less about the disadvantages [10].

A powerful debate is taking place in the medical community and lays press in recent months regarding cesarean delivery on maternal request (CDMR) even in normal uncomplicated pregnancy. Currently, International Federation of Gynecology and Obstetrics (FIGO), the World Health Organization (WHO) and the Society of Obstetricians and Gynecologists of Canada do not support CDMR [11]. The reasons cited are the lack of evidence demonstrating that in a normal low risk pregnancy CS carries less risk than vaginal delivery for mother and baby and the attendant increased use of health resources [12].

The most meaningful comparisons of morbidity need to be between those women having an elective CS and those undergoing labor. No such studies have been done in fit healthy women with no medical indication for CS [13].

The implications for future child bearing are the most relevant long term consequences of CS. Some studies showed that the incidences of placenta praevia and placenta accreta increase almost linearly after each CS, but those were conducted following CSs performed for obstetric or medical indication

[14].

Conclusion

Nowadays, an increasing number of patients are requesting cesarean delivery for non-obstetric indications. Major factors influencing patients' decision are fear of labor pain, concern for fetal outcome, uncertainty of outcome of vaginal trial, astrophysical concerns and patients and obstetrician's convenience. Many of the women opted for cesarean delivery in our study for preventable reasons like painless labor and simultaneous tubectomy which would have been avoided by prior counseling starting from antenatal period and by providing labor analgesia. Proper education of the patient and personal involvement of the treating obstetrician in counseling the patient and her supporters can reduce cesarean delivery for maternal request.

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