

ORIGINAL ARTICLE

Analysis of prevalence of complications of Caesarean section delivery: An observational study

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ABSTRACT:

Background: The present study was conducted for evaluating the prevalence of complications of Caesarean section delivery. **Materials & methods:** There were two hundred participants registered who were scheduled for Caesarean section. All of the subjects' full clinical and demographic information was gathered. Every subject's complete medical history was documented. All the pertinent information was recorded and a performa was created. Every patient's baseline biochemical and hemodynamic parameters were noted. Under combination spinal-epidural anesthesia, all Caesarean sections were carried out. A continuous patient monitoring program was implemented. Any complications were noted individually and examined. With the aid of SPSS software, all the results were evaluated. **Results:** Overall complications were seen in 14 percent of the patients. Transient Tachypnea of the Newborn, Respiratory distress syndrome, Labor injuries, NICU admission, Muscle pain, Infection, Fever and Abnormal bleeding was seen in 3.5 percent, 2.5 percent, 2 percent, 1 percent, 2 percent, 3 percent, 1.5 percent and 2.5 percent of the patients respectively. **Conclusion:** The surgical process of a cesarean section carries a number of risks for the mother and the unborn child. Because of this, a cesarean section should be used with caution and cannot be seen as a substitute for a natural birth.

Key words: Complications, Caesarean Section

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INTRODUCTION

Scientific progress, social and cultural changes, and, in particular, legal change have led to a fundamental change in attitudes to cesarean section among patients and doctors. In fact, the consensus around the indications for cesarean section has changed in many countries, now including psychosocial factors such as anxiety about the delivery, or even the mother's wish to have a cesarean section in the absence of any medical indication. Nevertheless, the reasons for increasingly liberal attitudes toward cesarean section are diverse and not always easily discernable.¹⁻³ One in four women who gives birth in the United States does so by cesarean delivery, making cesarean section the most common hospital surgical procedure. Health professionals have attributed this high rate of cesarean delivery to an increased use of electronic fetal monitoring, a reluctance to deliver vaginally in cases of breech presentation or prolonged labor, a decreased use of forceps, a fear of malpractice suits, and increasing numbers of previous cesarean deliveries.^{4,5} For a term pregnancy with a breech presentation the risk of emergency cesarean is over 40%. If the baby is in a cephalic presentation, the risk of emergency cesarean may be less than 5% for a multiparous woman in spontaneous labour at 37 weeks' gestation, and as high as 35% for a primiparous woman who is having labour induced at 42 weeks' gestation. Other factors, such as maternal age, may also affect this risk. If the mother has a vaginal birth, it may have

required a forceps delivery or resulted in tearing of the anal sphincter, or both, thus increasing the risks of urinary and fecal incontinence. Although pelvic floor muscle training may reduce the risk of postpartum incontinence, these exercises are not always prescribed by obstetric care providers.⁶⁻⁸ Hence; the present study was conducted for evaluating the prevalence of complications of Caesarean section delivery.

MATERIALS & METHODS

The purpose of the current study was to assess the frequency of problems following Caesarean section birth. There were two hundred participants registered who were scheduled for Caesarean section. All of the subjects' full clinical and demographic information was gathered. Every subject's complete medical history was documented. All the pertinent information was recorded and a performa was created. Every patient's baseline biochemical and hemodynamic parameters were noted. Under combination spinal-epidural anesthesia, all Caesarean sections were carried out. A continuous patient monitoring program was implemented. Any complications were noted individually and examined. With the aid of SPSS software, all the results were evaluated.

RESULTS

The present study was conducted for assessing complications associated with caesarean section.

Mean age of the subjects was 33.7 years. Overall complications were seen in 14 percent of the patients. Transient Tachypnea of the Newborn, Respiratory distress syndrome, Labor injuries, NICU

admission, Muscle pain, Infection, Fever and Abnormal bleeding was seen in 3.5 percent, 2.5 percent, 2 percent, 1 percent, 2 percent, 3 percent, 1.5 percent and 2.5 percent of the patients respectively.

Table 1: Prevalence of complications

Complications	Number of patients	Percentage
Present	28	14
Absent	172	86
Total	100	100

Table 2: Distribution of patients according to complications

Complications	Number of patients	Percentage
Transient Tachypnea of the Newborn	7	3.5
Respiratory distress syndrome	5	2.5
Labor injuries	4	2
NICU admission	2	1
Muscle pain	4	2
Infection	6	3
Fever	3	1.5
Abnormal bleeding	5	2.5

DISCUSSION

Caesarean section is one of the most commonly performed operations for women all over the world. The increase in the numbers of caesarean sections performed has been ascribed to the increased range of indications, increased numbers of preterm deliveries and increased legal disputes. The most important indications for caesarean section include breech presentation, protracted birth including failure to progress in labour, incipient intrauterine hypoxia and previous C-section. In the past few years it appears that the rate of elective C-sections has also risen, but no reliable figures are available on this point. It is also assumed that improvements in C-section techniques resulting in decreased maternal and foetal morbidity and mortality have also contributed to a more general use of this method of deliver.⁹⁻¹² Hence; the present study was conducted for evaluating the prevalence of complications of Caesarean section delivery.

In the present study, The present study was conducted for assessing complications associated with caesarean section. Mean age of the subjects was 33.7 years. Overall complications were seen in 14 percent of the patients. Mylonas I et al, in a previous study conducted a review based on pertinent publications that were retrieved by a selective search in the PubMed, Scopus, and DIMDI databases, as well as on media communications, analyses by the German Federal Statistical Office, and guidelines of the Association of Scientific Medical Societies in Germany (AWMF). The increased rates of caesarean section are thought to be due mainly to changed risk profiles both for expectant mothers and for their yet unborn children, as well as an increase in caesarean section by maternal request. In 1991, 15.3% of all newborn babies in Germany were delivered by caesarean section; by 2012, the corresponding figure was 31.7%, despite the fact that a medical indication

was present in less than 10% of all cases. This development may perhaps be explained by an increasing tendency toward risk avoidance, by risk-adapted obstetric practice, and increasing media attention. The intraoperative and postoperative risks of caesarean section must be considered, along with complications potentially affecting subsequent pregnancies. Scientific advances, social and cultural changes, and medicolegal considerations seem to be the main reasons for the increased acceptability of caesarean sections.¹¹

In the present study, transient Tachypnea of the Newborn, Respiratory distress syndrome, Labor injuries, NICU admission, Muscle pain, Infection, Fever and Abnormal bleeding was seen in 3.5 percent, 2.5 percent, 2 percent, 1 percent, 2 percent, 3 percent, 1.5 percent and 2.5 percent of the patients respectively. Our results were in concordance with the results obtained by previous authors who also reported similar findings. Häger RM et al determined complication rates after caesarean delivery and identified independent risk factors for complications. In their study, rates of predefined types of complications from 2751 caesarean deliveries were determined. The complications that were studied were intraoperative complications, blood loss, wound infection, cystitis, endometritis, hematoma, and reoperation. Independent risk factors were identified by stratification and multiple logistic regression analysis. Altogether, 21.4% of the women had > or = 1 complications. The degree of cervical dilation, general anesthesia, low gestational age, and fetal macrosomia were independent risk factors. For operations that were performed at 9 to 10 cm cervical dilation, the complication rate was 32.6% versus 16.8% at 0 cm (odds ratio, 2.39; 95% CI, 1.77-3.22; P<.001). Caesarean delivery was associated with a high complication rate. Increasing cervical dilation and, in

particular, cervical dilation of 9 or 10 cm at the time of operation, general anesthesia, low gestational age, and fetal macrosomia were identified as independent risk factors.¹²

CONCLUSION

The surgical process of a cesarean section carries a number of risks for the mother and the unborn child. Because of this, a cesarean section should be used with caution and cannot be seen as a substitute for a natural birth.

REFERENCES

1. Patel RM, Jain L. Delivery after previous cesarean: short-term perinatal outcomes. *Semin Perinatol*. 2010;34:272–280.
2. Harris LH. Counselling women about choice. *Best Pract Res Clin ObstetGynaecol*. 2001;15:93–107.
3. Minkoff H, Paltrow LM. Melissa Rowland and the rights of pregnant women. *Obstet Gynecol*. 2004;104:1234–1236.
4. Stafford R. Recent trends in cesarean section use in California. *Western Journal of Medicine*. 1990;153(5):511–514.
5. De Luca R, Boulvain M, Irion O, Berner M, Pfister RE. Incidence of early neonatal mortality and morbidity after late-preterm and term cesarean delivery. *Pediatrics*. 2009;123:e1064–e1071.
6. Lavoue V, Voguet L, Laviolle B, et al. Cesarean section at term: the relationship between neonatal respiratory morbidity and microviscosity in amniotic fluid. *Eur J ObstetGynecolReprod Biol*. 2013;169:239–243.
7. Tilden V, Lipson J. Cesarean childbirth: Variables affecting psychological impact. *Western Journal of Nursing Research*. 1981;3:127–141
8. Mikolajczyk RT, Schmedt N, Zhang J, Lindemann C, Langner I, Garbe E. Regional variation in caesarean deliveries in Germany and its causes. *BMC Pregnancy Childbirth*. 2013;13
9. Teixeira C, Correia S, Vitoria CG, Barros H. The Brazilian preference: cesarean delivery among immigrants in Portugal. *PLoS One*. 2013;8
10. Nieminen K, Stephansson O, Ryding EL. Women's fear of childbirth and preference for cesarean section—a cross-sectional study at various stages of pregnancy in Sweden. *Acta ObstetGynecol Scand*. 2009;88:807–813.
11. Mylonas, I., & Friese, K. (2015). Indications for and Risks of Elective Cesarean Section. *DeutschesArzteblatt international*, 112(29-30), 489–495.
12. Häger RM, Daltveit AK, Hofoss D, Nilsen ST, Kolaas T, Øian P, Henriksen T. Complications of cesarean deliveries: rates and risk factors. *Am J Obstet Gynecol*. 2004 Feb;190(2):428–34.