ISSN (Print): 2663-9491 ISSN (Online): 2789-6897

Original Article

The complications of caesarean section among 100 cases

DOI: https://dx.doi.org

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Received: 30 OCT 2021
Accepted: 08 NOV 2021
Published: 11 NOV 2021

Published by:
Sheikh Sayera Khatun Medical College Gopalganj, Bangladesh

How to cite this article:
Sultana N, Khan SJ, Sharifa BS, Akter T, Sharmeen S. The complications of caesarean section among 100 cases. The Insight [Internet]. 2021 Nov. 12 [cited 2021 Nov. 12];4(01):75-81. Available from: https://bdjournals.org/index.php/insight/article/view/88

ABSTRACT

Objective: *In this study our main goal is to evaluate the complications of Caesarean section among 100 cases.* ***Method:*** *This prospective study was carried out at Department of Obstetrics and Gynaecology, Comilla Medical College Hospital, Comilla from January to June, 2003. Where total of 100 consecutive cases were selected for this study who underwent Caesarean section.* ***Results:*** *During the study, most of the women belonged to the age group 26-30 years (40%), followed by 21-25 (29 %), 31-35 (20%) and ≤20 years (11 %). Most of the common indication for caesarian section are fetal distress, 29% followed by obstructed labour were 22%, placenta praevia were 12%, 10% had history of previous caesarian section, 8% had transverse lie with hand prolapse. Maternal complications after caesarian section 5% had primary postpartum haemorrhage and wound infection followed by 1% had burst infection and 87% had no complication. 92% women suffered from no complication due to anaesthesia, the rest 6% experienced post spinal headache and only 2% experienced severe hypotension.* ***Conclusion:*** *From our study we can say that, all pregnant women should be screened by appropriately trained physicians, non-physician health workers with relevant expertise to identify risk factors and to provide ANC and care during labour. Also, strengthening maternal and child health programme by properly activating the health infrastructure e by trained manpower starting from village up to district level and above.*

Keywords: Caesarean section, fetal distress, obstructed labour.

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The Insight 2021; 4(1): 75:81

INTRODUCTION

Caesarean section is the most commonly performed operation in obstetric practice. The term "Caesarean section" denotes the delivery of fetus, placenta and membranes through an incision in the abdominal and uterine wall [1]. The highest rate of caesarean section is in Chile 40% [2]. Rate of Caesarean section in Bangladesh is 31%. The world Health organization recommends a C section rate of between 10-15% of all births per country. Initiative to reduce the high rate of caesarean section it is important to focus on the indications of caesarean section for caesarean to

eliminate inappropriate indications and prevent the occurance of true indications.

Today, Caesarean section is not performed as a last resort but as a safe alternative where mother and/or fetus is at risk if vaginal delivery is allowed. The recent advancements in anaesthesia, antiseptic and aseptic techniques, antibiotics, blood transfusion and surgical techniques have reduced the maternal and fetal morbidity and mortality due to Caesarean section to a very low level. Still the operation is not totally free of hazards. Most of the cases of Caesarean section is done on emergency basis due to unforeseen complications arising either during pregnancy or during labour.

The first Caesarean section performed on a patient is known as primary Caesarean section, subsequent procedures are referred as secondary, tertiary and so on, or simply as repeat Caesarean section.

The complications of Caesarean section are related either to the operation OF to the indication for which the operation is done. So, complications are more following emergency rather than elective procedure [3].

In this study our main goal is to evaluate the complications of Caesarean section among 100 cases.

OBJECTIVE

- To evaluate the complications of Caesarean section among 100 cases.

METHODS AND MATERIALS

Study Type:

- This study was a prospective study.

Study Period and Place:

- This study was conducted in Department of Obstetrics and Gynaecology, Comilla Medical College Hospital, Comilla from January to June, 2003.

Sample Size:

- Total 100 consecutive cases were selected for this study who underwent Caesarean section.

METHOD

Data from individual patients were collected in a preformed questionnaire. Complication during Caesarean section, like severe hypotension, severe vasovagal attack, were noted from operative findings.

Postoperative complications were collected from patients' history and from follow-up monitoring. Fetal outcome was noted from operative findings and from follow-up monitoring. Remote complications of Caesarean section were not studied.

Data analysis procedure:

- First data were edited to the validity and consistency of the data. After proper verification data were coded and entered into computer by using SPSS software programmes. Descriptive analysis was done by percentage, mean and standard deviation. Association was observed by appropriate statistical test at 95% confidence interval e.g. odds ratio, Chi-square, t-test.

RESULTS

In table-1 shows age distribution of the study group where most of the women belonged to the age group 26-30 years (40%), followed by 21-25 (29 %), 31-35 (20%) and ≤20 years (11 %). Mean (+SD) age of the patients was 26.39 +4.52 (range: 16-35 years). The following table is given below in detail:

Table-1: Age distribution of the study group

Age group	N	%
≤20 years	11	11
21-25 years	29	29
26-30 years	40	40
31-35 years	20	20

In table-2 shows indication of caesarian section where fetal distress was common 29% among the other cases followed by 22% were obstructed labour, 12% were placenta praevia, 10% had history of previous caesarian section, 8% had transverse lie with hand prolapse. The following table is given below in detail:

Table-2: Indication of caesarian section

Indication of caesarian section	N	%
Obstructed labour	22	22
Fetal distress	29	29
Placenta praevia	12	12
History of previous caesarian section	10	10
Transverse lie with hand prolapse	8	8
Bad obstetric history	5	5
Cephalopelvic disproportion	5	5
Abruptio placenta	4	4
Severe preeclampsia	3	3
Eclampsia	2	2

In figure-1 shows distribution of the study group according to types of anesthesia where most of the women were given spinal anaesthesia before operation (83%), is given below in detail:

15% were given general anaesthesia and only 2% were given epidural anaesthesia. The following figure

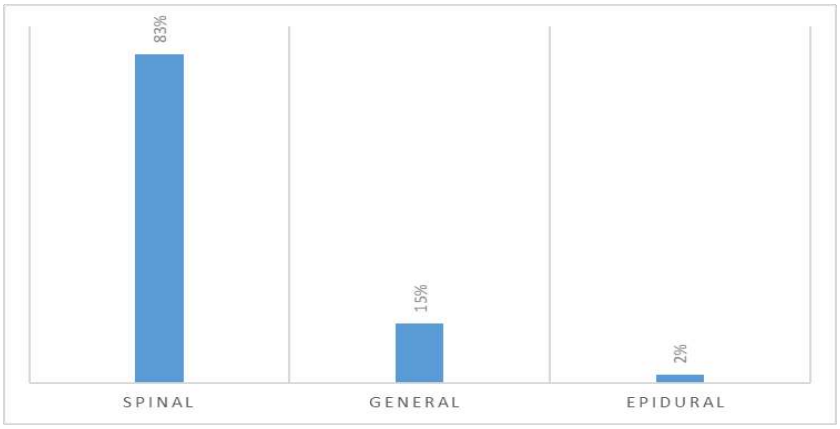

Figure-1: Distribution of the study group according to types of anesthesia.

In figure-2 shows complications of anesthesia where 92% women suffered from no complication due to anaesthesia, the rest 6 percent experienced post spinal headache and only 2 percent experienced severe hypotension. The following figure is given below in detail:

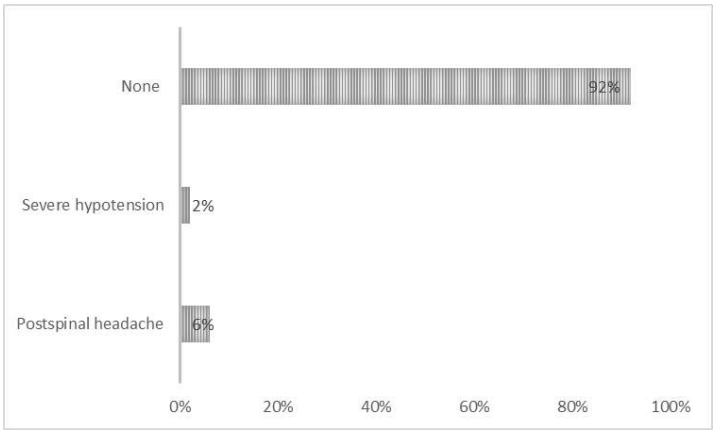

Figure-2: Complications of anesthesia.

In table-3 shows maternal complications after caesarian section 5% had primary postpartum haemorrhage and wound and 87% had no complication. The following table is given below in detail:

infection followed by 1% had burst infection

Table-3: Maternal complications after caesarian section

Complications	n	%
Primary postpartum haemorrhage	5	5
Wound infection	5	5
Urinary tract infection	2	2
Burst abdomen	1	1
No complication	87	87

In figure-3 shows distribution of the study group according antenatal care where only 20% women visit hospital for antenatal care regularly. The following figure is given below in detail:

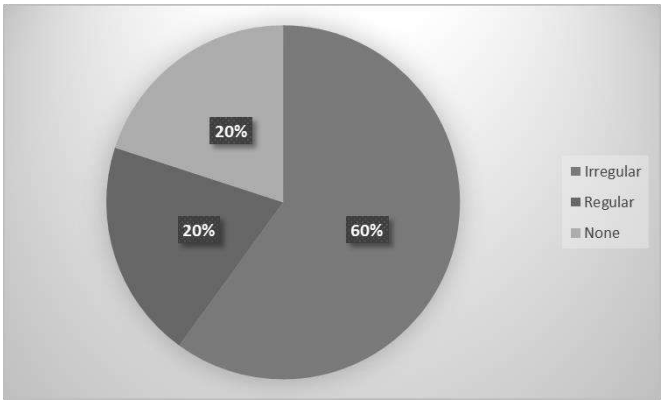

Figure-3: Distribution of the study group according antenatal care

In table-4 shows relation of antenatal care and maternal complication where maternal complication was absent in 20 women under regular antenatal care checkup regularly followed by 16.7% cases had complications who were irregular in antenatal care checkup and 20% 16.7% cases had complications found who didn't do any antenatal care checkup. The following table is given below in detail:

Table-4: Relation of antenatal care and maternal complication

Antenatal Care	Complications	
	Present, n (%)	Absent, n (%)
Regular	0	20(100%)
Irregular	10(16.7%)	50(83.3%)
No	4(20%)	16(80%)

In table-5 shows relationship between maternal complication and caesarian section procedure where 17.5% cases had maternal complication in emergency caesarian section where as in elective caesarian section was no complication. The following table is given below in detail:

Table-5: Relationship between maternal complication and caesarian section procedure

Maternal Complication	Caesarian section	
	Emergency (n=80), n (%)	Elective (n=20), n (%)
Present	14(17.5%)	0
Absent	66(82.5%)	20(100%)

In table-6 shows types of maternal complication in emergency caesarian section cases and its relationship with antenatal care where those who were irregular and didn't do antenatal care had some complication. In irregular cases, 3% had primary postpartum haemorrhage, 4% had wound infection, 2% had urinary tract infection and 1% had burst abdomen. The following table is given below in detail:

Table-6: Types of maternal complication in emergency caesarian section cases and its relationship with antenatal care

Maternal complication	Antenatal care		
	Regular (n=10), n (%)	Irregular (n=50), n (%)	No (n=20), n (%)
Primary postpartum haemorrhage	0	3	2(10)
Wound infection	0	4	1(5)
Urinary tract infection	0	2	0
Burst abdomen	0	1	0
No complication	10(100)	40(80)	17(85)

Chi square test: X^2= 7.224, df= 10, p= 0.704 (not significant)

DISCUSSION

In one study, majority 58 (52.7%) of the patients belonged to the age group 21-30 years where the mean age was found 27.5 ± 9.5 years[4]. Similar observation was found by another study where most of the patients 216 (55.95%) belonged to the age group of 26-30 years followed by 123 (31.86%) in age 21-25 years and 41 (10.62%) patients in age group of 31-35 years. Only 5 patients (1.29%) were above 35 years of age[5].

Whereas in our study, most of the women belonged to the age group 26-30 years (40 9»), followed by 21-25 (29 %), 31-35 (20 to) and n 20 years (11 %). Mean (-h SD) age of the patients was 26.39 +4.52 (range: 16-35 years).

The higher incidence of Caesarean section in the present study is probably due to inadequate antenatal care or no antenatal care at all, and most deliveries were handled by unskilled attendants who were unable to recognize the high-risk pregnancy and delivery, and ultimately the patients were referred to tertiary hospitals in a bad condition and need emergency Caesarean section.

Another study showed that, majority 73 (66.4%) patients were unbooked and 37 (33.6%) were booked. This fact reveals poor level of antenatal booking of the patients in Bangladesh. This may be because of low level of female literacy and lack of public awareness regarding the need for antenatal checkup[6]. Where as in our studyonly 20% of the patients came for antenatal care in hospital regularly.

Also, another study reported that, majority 37 (33.6%) of the patients had fetal distress. Other indications were obstructed labour 12 (10.9%), breech presentation 12 (10.9%), pre-eclampsia 10 (9.1%), severe oligohydromnios 7 (6.4%), APH 7 (6.4%), placenta previa 6 (5.5%), failed induction 5 (4.6%), transverse lie 4 (3.6%), CPD 3 (2.7%), IUGR 3 (2.7%), eclampsia 2 (1.8%), face presentation 1 (0.9%), and cord prolapse 1 (0.9%)[7].

Another study found most common indication for caesarean section in their study was malpresentation 115 (29.79%), followed by fetal distress in 71 (18.39%) patients, APH in 71 (18.39%), preeclampsia and eclampsia in 39 (10.1%), obstructed labour in 33 (8.55%) patients and cephalopelvic disproportion each and twin pregnancy in 21 (5.44%[8]. Where as in our study, fetal distress was common 29% among the other cases followed by 22% were obstructed labour, 12% were placenta praevia, 10% had history of previous caesarian section, 8% had transverse lie with hand prolapse.

This study shows that maternal complication occurred only in emergency Caesarean section. Out of 80 percent emergency Caesarean section, only 16.2 percent developed maternal complications; 6.3 percent primary postpartum haemorrhage, 6.3 percent Wound infection, 2.5 percent urinary tract infection and 1.3 percent. Other study observed that, in the post-operative period, 83 (75.5%) patients were healthy. Rest of them had sepsis in 12 (10.9%), URTI in 9 (8.2%), wound infection in 3 (2.7%), postoperative ileus in 2 (1.8%) and PPH in 1 (0.9%)[9].

CONCLUSION

From our study we can say that, all pregnant women should be screened by appropriately trained physicians, non-physician health workers with relevant expertise to identify risk factors and to provide ANC and care during labour. Also, strengthening maternal and child health programme by properly activating the health infrastructure e by trained manpower starting from village up to district level and above.

CONFLICT OF INTEREST:

No conflict of interest.

FUNDING:

None

ETHICAL APPROVAL:

Ethical approval was taken from the ethical review board of the hospital.

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