Indications of caesarean section- Study of 200 Cases in Lumbini Medical College

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ABSTRACT

Background: A Caesarean section is a surgical procedure in which one or more incisions are made through a mother's abdomen (laparotomy) and uterus to deliver one or more babies, or, rarely, to remove a dead fetus. **Methods and Materials**: This study was a prospective descriptive one. It was done in Lumbini Medical College from 2068 Shrawan to 2069 Ashad. A total of 1419 deliveries occurred of which 234 deliveries by LSCS, incidence of LSCS was 16%. The commonest age group being operated ranged from 21-25 years (47.5%). Most of the patients who had undergone LSCS were multigravida-50.5%. The section was due to various indications, the most commonest cause in this study were fetal distress and obstructed labour, non progress of labour, the primary rate of LSCS was 85% while repeat section being 15%. **Results**: The Peak range of operations were done. In patients with 5 feet 2 inches height, the rate of elective LSCS 26.5%. Where emergency CS were done in 73.5% of cases. Regarding fetel outcome 97.5% survived and 2.5% had death. **Conclusions** : Fetal distress and non progress of labor was the commonest indication for Caesarean section in our instituition.

Keyword: *Caesarean section,incisions, indications*

INTRODUCTION

Caesarean section is a common operative procedure in obstetrics practice. Though it was introduced in clinical practice as a lifesaving procedure both for mother and newborn.

The rising trend of caesarian section in modern obstetrics is a major concern in health care system all over the world.[1]

According to WHO rates of LSCS in many countries have increased beyond the recommended level of 15%, specially in France, Australia, North America, UK, Brazil, China and India the rate of LSCS in America 23% till 1991. The national C section rate of Canada was 20% and Italy was 17.5%.[1] Even though the indication of CS have not changed so far and these remain foetal distress, malpresentation, multiple gestation, previous caesarean, protracted labour and CS on demand, Current available data from developed countries revealed morbidity and mortality from CS is more than in vaginal delivery for both the mother and fetus. Thus this study was conducted to evaluate the rate and indication for CS in various indication.

METHOD OF STUDY

This prospective study was carried out in the department of obstetrics and gynecology, Lumbini Medical College, Palpa from 2068 Asadh to 2069 Shrwan. Total 200 cases were selected after taking consent, detailed history was taken from all cases, examination was done from date of admission up to the day of discharge. 34 cases were excluded because of improper ANC records which was done outside. CPD was tested mainly by clinically pelvimetry labor patient was monitored by doing Partogram. In elective cases-all investigation done. Puerperal period up to the day of discharge was observed. 90% of patient operated by spinal anesthesia, 10% under GA. Blood Donor was kept ready in selected cases such as Placenta Preavia, repeat LSCS and Eclampsia.

RESULT

A total of 1419 deliveries occurred the study period of which 1185 deliveries were by Vaginally and 234 delivery by LSCS. The rate of LSCS among all these delivery 16%. Indication of Caeserian-section- study of 200 cases in Lumbini Medical College, Palpa.

DISCUSSION

Caesarean section is used in cases in which vaginal delivery either is not feasible or would impose undue risk on mother or baby. Due to greater awareness of serious fetal distress & avoidance of mid forceps & vaginal breech deliveries the rate of LSCS has steadily increased from (5% to 20%).[2]

In this study the total number of deliveries was 1419 and of which 234 (16%) was caesarean deliveries.

The incidence of LSCS only 16% in our study which was nearing the WHO recommendation. Analysis of age of the patient showed that 72.5% of cases (table 1) were in the age group of maximum fertility i.e. between 20-30yrs. A study in IPGMR showed 89% amongst this age group.[3] The study of Latin American hospital showed

maximum incidence >30 years in primi patients, which might reflect delayed marriage in (western countries).[4]

Table-1: Age of Patient who underwent LSCS (N=200)

Age Groups (years)	Percentage
15-20	20%
21-25	47.5%
26-30	25%
31-35	5%
36-40	25%
Total	100%

This table shows LSCS % maximum at age 21-25yrs.

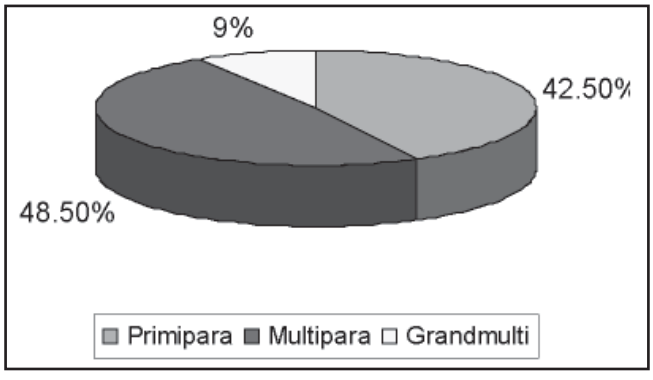
Short maternal height has been associated with an increased of CPD, in our study (table 2) showed that 68% patent were more than 5 feet. Alam showed 76% patient >5' and Zaman showed 70% >5' in their studies.[5,6] This may be explained by the fact that all the LSCS were not only due to CPD.

Table-2: Incidence of LSCS in relation to height of the patient (N=200)

Height (feet)	Percentage
4^0	2%
$4^0$8"	4%
4.9^0-5"	26%
5.1"	28%
5.2"	25%
5.3"	12%
Above 5.4"	3%
Total	100%

From the above table, 68% patent were above 5 feet in height-32% were below 5 feet

Study in IPGMR 1987, Sir Sallimullah Medical College (SSMC) & Mitford Hospital 1992 showed higher incidence in multi.[4-6] Present study also correlates with it (Fig. I).



In the developed countries in the past decade indications of LSCS were breech presentation, fetal distress, previous section & dystocia.[7] In this study, common indications were fetal distress 22%, NOPL 16.5%, previous LSCS 12.5%, obstructed labor 10%, pre-eclampsia and eclampsia 9.5%, breech 8%, bad obstetric history 5%.

Table-3: Indication for LSCS (N=200)

Indication	Total	Prime	Multi
Previous LSCS	30	0	30
Foetal distress	44	26	18
Obstructed labour	20	15	5
NPOL (induction failed)	33	23	10
Pre-eclampsia	15	9	6
Bad obstetric history	10	-	10
Breech Px	16	8	8
CPD	13	7	6
Transverse lie	3	2	1
Placenta praevia	2	2	0
Eclampsia	4	3	1
Cord prolapse	4	1	3
Face presentation	3	2	1
Brow presentation	3	1	2

This table shows fetal distress and NPOL(non progress of labor). Mainly responsible for LSCS in Primigravida. Previous CS was main indication in multigravidia among all, fetal distress occupiese the highest indication of LSCS

Table-4: Nature of operations with indication (N=200)

Indication	Nature of	
	Elective (%)	Emergency (%)
Previous CS	12.5%	2.5%
Foetal disetres	0	22%
Obstructed labour	0	10%
NPOL	0	16.5%
Pre-eclampsia	1%	6.5%
Eclampsia	0	2%
Bad obstetric history	5%	0
Breech presentation	5%	3%
Placenta Pravia	1%	0
CPD	2%	4.5%
Corel prolapse	0	2%
face presentation	0	1.5%
Brow presentation	0	1.5%
Transverse lie	0	1.5%
Total	26.5%	73.5%

The table shows emergency LSCS was 73.5% and elective LSCS was 26.5%.

Table-5: Comparison of Primary and Repeat Section (N=200)

Caeserean section	Percentage
Primary	85%
Repeat	12%
Third section	3%

This section show primary section was more relation to repeat section.

Repeat sections constitute the commonest indication for LSCS in most other countries. It varies from 35% of all LSCS in the USA to 23% in Norway, the lowest 18% being in Hungry.[8]But in our college in 200 cases lowest repeat section 15%.

In a study in IPGMR elective LSCS was 52% and

emergency LSCS was 48%.[6] This was because patients due to previous operation or pregnancy associated complications, admitted in that institute for elective LSCS. There are high incidence of elective LSCS in western countries because of their sophisticated electronic foetal monitoring system.[9] Different studies from India showed incidence of emergency section was 82.7% and 85.92%.[10] Study in SSMC & Mitford Hospital findings of emergency LSCS was 69.71% and elective LSCS was 30.29%.[4] This correlates with our study, where emergency LSCS was 73.5% and elective was 26.5%. This may be explained by the fact that the patients were brought into hospital when crises arise, when traditional birth attendants may have failed to deliver them with utmost attempt.

In a study by Dawn and Chakrabarti at Eden Hospital, Kolkata, the incidence of morbidity was 37.5% and abdominal wound infection was major morbidity.[11]

Hammouda reported a maternal morbidity rate of 28.5% in the form of wound and urinary tract infection & there were no maternal death.[12] Present experience was similar to this study.

CONCLUSION

In modern obstetrics, Caesarean section is a major surgical procedure for delivery. In spite of its low rate of maternal morbidity and mortality due to improved surgical technique and modern anesthetic skill, it still carries a slightly greater risk than normal vaginal delivery and more risk in subsequent pregnancies. Those risks can be reduced by giving advice for a strict and regular antenatal check up during pregnancies to emphasize the need for an elective operation, if the indications are recurrent one.

Though we need to have more sophisticated modalities to diagnose it in a proper way, in our study we found that most common indications for Cesarean section is fetal distress and non progress of labor

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