Original Article

Caesarean Section Delivery

Incidence of Caesarean Section Delivery in District Sialkot

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ABSTRACT

Objective: To evaluate the incidence of Caesarean section delivery in District Sialkot.
Study Design: Observational / descriptive Study.
Place and Duration of Study: This study was conducted at the Department of Obstetrics and Gynecology at Idris Teaching Hospital Sialkot, Islam Teaching Hospital Sialkot, Allama Iqbal Memorial Teaching Hospital Sialkot and number of private hospitals of the Sialkot from January 2015 to July 2016.
Materials and Methods: One thousand caesarean section deliveries were included in this retrospective study in the department of obstetrics and gynecology at Idris Teaching Hospital Sialkot, Islam Teaching Hospital Sialkot, Allama Iqbal Memorial Teaching Hospital Sialkot and number of private hospitals of the Sialkot. The charts were reviewed, and age, history of the patient, family history of the caesarean section delivery, date of caesarean section delivery , number of caesarean section delivery, socio economic status, area of the patient, anesthesia used for caesarean section delivery were recorded on designed Performa. The fully informed consent of every patient prior to surgery was recorded. Ethical committee permission of all institutes was taken. The results were analyzed by SPSS version 10.
Results: In our study the incidence of caesarean section delivery were maximum (63.3%) 633 cases at the age of 26-30 years and minimum (3.4%) 34 cases at the age of 16-20 years. It was observed that incidence of caesarean section delivery was much higher (51.1%) 511 cases in middle socio economic class as compared to high socio economic group (17.6%) 176 cases and low socio economic group (31.3%) 313 cases. The women belonging to rural area had almost double incidence (70.3%) 703 cases as compared to urban area (29.7%) 297 cases. The incidence was maximum (42%) 420 cases in women having second caesarean section delivery and minimum (10.1%) 101 cases. The incidence was almost double (69.3%) 693 cases in planned C Section delivery as compared to emergency C Section delivery (30.7%) 307 cases. It was also seen that the incidence of C Section delivery was almost double (70.3%) 703 cases under spinal anesthesia as compared to C-Section delivery under general anesthesia (29.7%) 297 cases. Indication of C-Section delivery was maximum (23.7%) 237 cases in previous C-Section and minimum (1.7%) 17 cases of Preeclampsia.
Conclusion: The unnecessary caesarean section delivery should be avoided. Proper antenatal care and counseling regarding the planned hospital delivery. Proper diagnosis of labour. Partogram should be maintained for good monitoring of progress of labour especially in patients with previous one caesarean section. Good analgesia and proper fetal monitoring during labour. Expertise in external cephalic version and vaginal breech delivery in good selected cases.
Key Words: Caesarean section delivery, Socio economic status, Consent, Ethical Committee

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INTRODUCTION

Cesarean section (CS) was introduced in clinical practice as a life saving procedure both for the mother and the baby[1-4].

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Caesarean section (CS or C-section) is a surgical intervention which is carried out to ensure safety of mother and child when vaginal delivery is not possible (emergency CS) or when the doctors consider that the danger to the mother and baby would be greater with a vaginal delivery (planned CS).

Based on the presentations in the conference and a systematic review of literature, the conference panel stated that though there was lack of sufficient evidences to evaluate fully the benefits and risks of planned caesarean delivery over planned vaginal delivery, the following outcomes were supported by at least some evidences: compared to planned vaginal delivery and unplanned CS, planned caesarean delivery was associated with[1] a lesser risk of postpartum haemorrhage and stress urinary

incontinence,[2] an increased risk of infection, anaesthetic complications and placenta previa,[3] greater complications in subsequent pregnancies[4] longer hospital stay of mothers and neonates,[5] higher risk of respiratory morbidity for infants and[6] a lower rate of foetal mortality, birth injury, neonatal asphyxia and encephalopathy.

Several studies have shown an inverse association between CS rates and maternal and infant mortality at population level in low income countries where large sectors of the population lack access to basic obstetric care.[2-4] On the other hand, CS rates above a certain limit have not shown additional benefit for the mother or the baby, and some studies have even shown that high CS rates could be linked to negative consequences in maternal and child heath.[2,3,5-8] Bearing in mind that in 1985 the World Health Organization (WHO) stated: "There is no justification for any region to have CS rates higher than 10-15%",[9] we set out to update previous published estimates of CS rates worldwide[2-3], and calculate the additional number of CS that would be necessary in those countries with low national rates as well as the number of CS in excess in countries in which CS is overused[10].

MATERIALS AND METHODS

One thousand caesarean section deliveries were included in this retrospective observational study in the department of gynecology at Idris Teaching Hospital Sialkot, Islam Teaching Hospital Sialkot, Ilama Iqbal Memorial Teaching Hospital Sialkot and number of private hospitals of the Sialkot during January 2014 to July 2016.

The charts were reviewed, and age, history of the patient, family history of the caesarean section delivery, date of caesarean section delivery , number of caesarean section delivery, socio economic status, area of the patient were recorded. The fully informed consent of every patient prior to surgery was recorded. The results were analyzed by SPSS version 10.

RESULTS

In our study the incidence of caesarean section delivery was maximum (63.3%) 633 cases at the age of 26-30 years and minimum (3.4%) 34 cases at the age of 16-20 years as shown in the table no.01. It was observed that incidence of caesarean section delivery was much higher (51.1%) 511 cases in middle socio economic class as compared to high socio economic group (17.6%) 176 cases and low socio economic group (31.3%) 313 cases as shown in table no.02. The women belonging to rural area had double incidence (70.3%) 703 cases as compared to urban area (29.7%) 297 cases as shown in table no.03. The incidence was maximum (42%) 420 cases in women having second caesarean section delivery and minimum (10.1%) 101 cases as shown in table no.04.

Table No. 1: Age distribution in Incidence of Caesarean section delivery

Sr No	Age(Years)	Cases	Percentage
1	16-20	34	3.4%
2	21-25	123	12.3%
3	26-30	633	63.3%
4	31-35	143	14.3%
5	35-40	67	6.7%
	Total	1000	100%

Table No. 2: Socio economic status distributions in Incidence of Caesarean section delivery

Sr. No.	Socio economic status	Cases	Percentage
1	High	176	17.6%
2	Middle	511	51.1%
3	Low	313	31.3%
	Total	1000	100%

Table No. 3: Area distributions in Incidence of Caesarean section delivery

Sr. No.	Area	Cases	Percentage
1	Urban	297	29.7%
2	Rural	703	70.3%
	Total	1000	100%

Table No. 4: Number of Caesarean section delivery

Sr. No.	Number of C-Section	Cases	Percentage
1	First	276	27.6%
2	Second	420	42.0%
3	Third	203	20.3%
4	Fourth and above	101	10.1%
	Total	1000	100%

Table No. 5: Emergency/ Planned Caesarean section delivery

Sr. No.	Emergency/Planed C-Section	Cases	Percentage
1	Planned	693	69.3%
2	Emergency	307	30.7%
	Total	1000	100%

The incidence was almost double (69.3%) 693 cases in planned C Section delivery as compared to emergency C Section delivery (30.7%) 307 cases as shown in table no.05. It was also seen that the incidence of C Section delivery was almost double (70.3%) 703 cases under spinal anesthesia as compared to C-Section delivery under general anesthesia (29.7%) 297 cases as show in table no.06.Indication of C-Section delivery was maximum (23.7%) 237 cases in previous C-Section and

minimum (1.7%) 17 cases of Preeclampsia as shown in table no. 07.

Table No. 6: Anesthesia used in C Section delivery

Sr. No.	Anesthesia used in C Section	Cases	Percentage
01	General Anesthesia	297	29.7%
02	Spinal Anesthesia	703	70.3%
	Total	1000	100%

Table No. 7: Indications of Caesarean section delivery

Sr. No.	Indications	Cases	Percentage
1	Previous C-Section	237	23.7%
2	Failed Progress of Labour	193	19.3%
3	Fetal Distress	137	13.7%
4	Breech Presentation	370	37.0%
5	Preeclampsia	17	1.7%
6	Excessive Bleeding	46	4.6%
	Total	1000	100%

DISCUSSION

An analysis shows that every year in the world there is an additional need for 0.8 – 3.2 million CS in low income countries where 60% of the world's births occur. Simultaneously, 4.0-6.2 million CS in excess are performed in middle and high income countries where 37.5% of the births occur[12-13].

Shewli Shabnam reported in study that caesarean delivery is highest among mothers of age group above 34 years. C-Section delivery rate is higher for women having multiple births and having baby for the first time.

But in our study the incidence was highest in age group 26-30 years, women of middle socio economic group & women belonging to rural area. The percentage of C-section delivery was highest at the second birth. It was also seen that the percentage of C-Section delivery was higher in planned C-Section as compared to emergency C-Section delivery. C-Section delivery under spinal anesthesia was higher as compared to C-Section delivery conducted under general anesthesia. In case of indications of C-Section delivery, the incidence was higher in women having C-Section in previous births as compared to other indications.

Gulfreen Haider et al reported in her study that most of the patients undergoing C-Section delivery were 25-35 years of age[17].

Lubna Ali from Karachi Pakistan reported repeat caesarean section the commonest indication for caesarean section[18].

She also reported, the second most frequent indication observed in her study was failed progress 18.29%. This was mainly due to mishandling by Daies, injudicious use of oxytocin or unjustified induction of labour without prior assessment of risk factors, foetal size, position, presentation, stage of labour, and pelvic adequacy. A similar retrospective study, factor responsible of high caesarean section rate in Pakistan during study period 1985 – 1996 were mostly dystocia(6.32%), repeat caesareansection(5.8%), fetal distress(3.5%) and caesarean rate was 27.26% in primigravada and 24.1% in multipara23. Current research suggests that labour induction makes a caesarean section more likely among primigravidas if cervix is unfavorable[19-20].

CONCLUSION

The unnecessary caesarean section delivery should be avoided. Proper antenatal care and counseling regarding the planned hospital delivery. Proper diagnosis of labour. Partogram should be maintained for good monitoring of progress of labour especially in patients with previous one caesarean section. Good analgesia and proper fetal monitoring during labour. Expertise in external cephalic version and vaginal breech delivery in good selected cases.

Conflict of Interest: The study has no conflict of interest to declare by any author.

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