International Journal of
Recent Innovations in Medicine and Clinical Research
Open Access, Peer Reviewed, Abstracted and Indexed Journal

ISSN: 2582-1075
https://ijrimcr.com/
Volume-2, Issue-3, 2020: 140-143

The Incidence and Indications of Caesarean Sections in King George Hospital (KGH), Visakhapatnam

Sravani K[1], Lavanya P[2].

Author Affiliations
[1]Dr. Sravani K, 2nd Year, Diploma in Gynaecology and Obstetrics
[2]Dr. Lavanya P, 2nd Year, Diploma in Gynaecology and Obstetrics

Received: August 18, 2020 **Accepted:** September 7, 2020 **Published:** September 16, 2020

Abstract: Background: Caesarean section is the delivery of the fetus alive or dead through an abdominal uterine incision after the period of viability. It is the most commonly done surgical procedure in the modern day practice for the better maternal and fetal outcome. To analyse the incidence and indication of caesarean sections is the main objective of this study. **Materials and Methods:** This is a prospective study conducted in King George Hospital, Visakhapatnam from June 2018 to May 2019. Data is collected and statistical analysis of various parameters like age, parity, antenatal care, period of gestation and indication of caesarean section is done. **Results:** Total number of deliveries occurred in KGH during the period are 2811. Of which C-Sections are 1241(44%). The leading cause for this is prior caesarean delivery (36%), followed by Nonreassuring fetal status (14.26%), Non-progression of labor (9.6%), Oligoamnios (8.3%), Malpresentation (7.4%), Failed induction (6.5%), Cephalopelvic disproportion (6.2%). **Conclusion:** Being a tertiary care hospital, a high rate of caesarean sections is observed. Nonreassuring fetal status is the leading cause of primary c-section. Individualization of indication and careful evaluation, following standard guidelines, practice of evidence based Obstetrics and audits may help to limit C-section rate.
Keywords: Caesarean section, oligoamnios, malpresentation.

Introduction

Caesarean section is one of the most commonly done surgical procedures in present day practice. It is done mainly for better maternal and fetal outcome. There is progressive rise in caesarean section rate in both developed and developing countries [1]. This increasing rate has become a major public health issue because

- ✓ It is a major burden to the family and society [2].
- ✓ It has been observed that there is an increased risk of maternal and perinatal morbidity in caesarean section compared to vaginal deliveries [3].

The indications for caesarean sections vary among different institutions, as there is no standard classification system [4,5]. A major challenge is that definitions are not standardized, indications are multiple and related [6]. In order to understand how C-section rate can be decreased, it is important to know various indications.

- ✓ The major indications for primary C-section are Nonreassuring fetal status, Non progression of labor, Oligoamnios, Malpresentations, Failed induction, Cephalopelvic disproportion.
- ✓ This is a step to find out indication of LSCS which may help to reduce C-section rate in future.

Methods and Materials

The data for present study is collected from the case sheets of patients admitted in Department of Obstetrics and Gynaecology, King George Hospital Visakhapatnam, from June 2018 to May 2019.

Data regarding age of the patient, parity, antenatal care, gestational age, presentation, number of fetuses, indication for LSCS and whether it is electively or emergently done is taken.

Total C-sections are taken and analysis is done regarding each parameter.

Results

There is a total of 2811 deliveries during the study period, of which 1241 are delivered by C-section, which accounts for 44%. The rate of primary section is 64%. Rate of emergency C-section is 83%.

Table 1. The Caesaraen Section Rates

Caesaraen Section Rates	No. of Cases	%
Mode of Delivery		
Vaginal	1570	56
Abdominal	1241	44
Primary or Repeat		
Primary	795	64
Repeat	446	36
Elective or Emergency		
Elective	211	17
Emergency	1030	83

Table 2. Demographic Analysis of patients who underwent Caesarean section

Demographic Analysis	No. of Cases	%
Age Group		
19 years and below	31	2.5
20-25 years	794	64.06
26-30 years	340	27.4
31-35 years	63	5.08
> 35 years	12	0.96
Parity		
Primipara (G1)	560	45.16
Multipara (G2-G4)	661	53.30
Grand Multipara (G5+)	19	1.5
Antenatal Status		
Booked	531	42.7
Unbooked	710	57.3

Table 3. Percentage of C-Section in relation to period of gestation

Period of gestation	No. of cases	%
Preterm (<37 weeks)	125	10.07
Term (>37weeks)	1090	87.84
Postterm (42 weeks +)	26	2.09

Table 4. Indication of Caesarean Section

Indication	No. of cases	%
Repeat section	446	36
Nonreassuring fetal status	177	14.26
Non progession of labor	119	9.6
Oligoamnios	102	8.3
Malpresentations	91	7.4
Failed induction	80	6.5
Cephalopelvic disproportion	78	6.2
Preeclampsia and Eclampsia	36	3
APH	28	2.2
Precious pregnancy/Maternal request	22	1.7
IUGR/Abnormal Doppler	20	1.6
Multiple gestations	21	1.6
Medical complications	18	1.4
Cord prolapse	2	0.16
ICT +ve	1	0.08

Table 5. Indications of Repeat Caesarean Sections

Indication	No. of cases	%
Scar Tenderness	145	32.5
Maternal Request/Not willing for VBAC	71	16
Cephalopelvic disproportion	60	13.4
Fetal distress	38	8.5
Preeclampsia and Eclampsia	28	6.2
Oligoamnios	26	5.8
IUGR/Abnormal Doppler	23	5.2
Malpresentations	20	4.5
Medical complications	20	4.5
Multiple gestations	8	1.8
APH	7	1.6
Total	**446**	**100**

Discussion

Caesarean section has been increasing in both developed and developing countries.

The probable causes for this will be

- ✓ Increased institutional deliveries.
- ✓ Use of Electronic Fetal Monitoring is widespread.
- ✓ Avoiding difficult manipulative or instrumental deliveries.
- ✓ Fetuses with breech, post-caesarean are now delivered mostly by caesarean delivery.
- ✓ Rate of VBAC has decreased.
- ✓ Maternal request for C-section has been increasing.
- ✓ Pregnancy after Assisted Reproductive Techniques and BOH are willing for C-section.
- ✓ Malpractice litigation related to fetal injury during spontaneous and operative vaginal delivery.

The Caesarean Section Rates

The caesarean section rate in this study is 44%, which is much more than accepted upper norm of WHO-15%.

The Caesaraen section Indications

Repeat caesarean section is the leading cause, of which Scar tenderness followed by maternal request or those not willing for VBAC leads. In both these cases, vaginal delivery can't be allowed.

Indication for primary C-section in order of frequency are Nonreassuring fetal status, Nonprogression of labor, Oligoamnios, Malpresentations, Failed induction, CPD, Preeclampsia, APH, Precious pregnancy.

Demographic Profile

Age based analysis of C-section shows, those of 20-25 age group are the ones with maximum section rate (64.06%), followed by 26-30yrs age group (27.4%), which is the maximum fertility group.

Being a tertiary care hospital, with high number of referred cases, C-sections among the unbooked cases account for 57.3%, remaining are booked cases-42.7%.

Conclusion

Greatest emphasis attached to fetal welfare in today's practice has changed the delivery practice in favor of C-section. In this study, Nonreassuring fetal status is the leading cause of C-section. Some means of Intra uterine Resuscitation like left lateral position, adequate hydration, oxygenation, Amnioinfusion, Tocolysis can be performed. To decrease C-section rate different approaches are required for different indication. Individualization of indications and careful evaluation, following standard guidelines, practice of evidence based obstetrics and audits can help to limit C-section rate.

Conflicts of interest

There are no conflicts of interest.

References

1. National Institutes of Health state-of-the-science conference statement: Cesarean delivery on maternal request March 27-29, 2006. Obstet Gynecol. 2006;107(6):1386-1397.
2. Gibbons L, Belizán JM, Lauer JA, Betrán AP, Merialdi M, Althabe F. The global numbers and costs of additionally needed and unnecessary caesarean sections performed per year: overuse as a barrier to universal coverage. World Health Report. 2010 Jan 1;30(1):1-31.
3. Belizán JM, Cafferata ML, Althabe F, Buekens P. Risks of patient choice cesarean. Birth. 2006 Jun;33(2):167-9.
4. Caughey AB, Cahill AG, Guise JM, Rouse DJ, American College of Obstetricians and Gynecologists. Safe prevention of the primary cesarean delivery. American J Obst Gynecol. 2014 Mar 1;210(3):179-93.
5. Torloni MR, Betran AP, Souza JP, Widmer M, Allen T, Gulmezoglu M, Merialdi M. Classifications for cesarean section: a systematic review. PloS one. 2011 Jan 20;6(1):e14566.
6. Singh G, Gupta ED. Rising incidence of caesarean section in rural area in Haryana India: A retrospective analysis. Internet J Gynecol Obstet. 2013;17(2):1-5.

Citation: Sravani K, Lavanya P. The Incidence and Indications of Caesarean Sections in King George Hospital (KGH), Visakhapatnam. Int J Rec Innov Med Clin Res. 2020;2(3):140-143.