Prevalence and Indications of Caesarean Section in a Teaching Hospital.

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Abstract: Objective of the study was to assess the prevalence and different indications of caesarean section in a teaching hospital. It was descriptive cross sectional study carried out in Department of Obstetrics and Gynecology over one year period. Out of 1149 pregnancies, 246 caesarean sections were performed, while rest had normal vaginal deliveries. The prevalence of caesarean section in the study population was 21.40%. The most common indication of caesarean section was previous caesarean section (22.76%) followed by failed progress of labour (18.29%), fetal distress (15.44%) and breech presentation (14.25%) respectively. Conclusion: The rising prevalence of caesarean section was mainly due to previous caesarean section followed by failed progress. Certain measures have been recommended to curtail the increasing trend.

INTRODUCTION

Pregnancy and delivery are considered as normal physiological phenomena in women. Approximately, 10% deliveries are considered as high risk, some of which may require caesarean section. The first modern caesarean section was performed by German gynecologist Ferdinand Adolf Kefer in 1881. Caesarean section is normally performed when a vaginal delivery would put the mother and baby’s life at risk but sometimes it is also performed on request. In recent years the rate has risen to a record level of 46% in China and 25% or above in many Asian and European countries, Latin America and USA. Caesarean section is common surgical operation now and most estimated prevalence rate of 33%; prevalence ranges from 4% in Africa to 29% in Latin America and Caribbean. Increasing caesarean section rate is an issue of public health concern globally for last 30 years; its use has increased since 1970 to a level that would put the mother and baby’s life at risk but sometimes it is also performed on request. In recent years the rate has risen to a record level of 46% in China and 25% or above in many Asian and European countries, Latin America and USA. Caesarean section is common surgical operation now and most estimated prevalence rate of 33%; prevalence ranges from 4% in Africa to 29% in Latin America and Caribbean.

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The steadily increasing global rate of caesarean section have become one of the most debated topics in maternity care as its prevalence has increased alarmingly in the last few years. Caesarean section rate in USA is 29.1%, England 21.5% and Pakistan 0.8%. There is no consensus about what the ideal caesarean section rate should be, however World Health Organization states that no additional health benefits are associated with a caesarean section rate above 15%. Leitch stated that indications for caesarean section should be the focus of study that leads to increased caesarean section rate. Pakistan being a developing country has increased caesarean section rate. The aim of this study was to find the prevalence and different indications of caesarean section in the catchment areas of Sharif Medical & Dental College so that certain measures may be proposed to decrease the caesarean section rate. This study was conducted in Sharif Medical & Dental College Lahore in the department of Obstetrics and Gynecology from 1st November, 2010 to 30th October, 2011. This was a descriptive cross sectional study. The study included 1149 pregnant females after meeting the selection criteria. Inclusion criteria: Age 20-45 years, booked patients for caesarean section, all women who were booked as well as emergency cases for trial of delivery.

Exclusion criteria: Gestational age< 28 weeks.

RESULTS

A total of 1149 pregnant females were included in the study. 246 females underwent caesarean section. The caesarean section prevalence was 21.40%. Graph depicts that 30% of females were primigravida, 41% females were between G2-G4 and 29% were G5 or above.

Graph: Gravidity Wise Distribution of Patients n=246

Results showed that out of 246 caesarean sections, 95 caesarean sections (38.6%) were performed electively while 151 caesarean sections (61.35%) were performed on emergency basis. As far as various indications of caesarean sections are concerned, previous caesarean section was the most frequent indication (22.76% p-value > 0.05). After that failed progress of labour (18.29% p-value > 0.05), fetal distress (15.44% p-value > 0.05) and breech presentation (14.25% p-value > 0.05) were the leading causes of caesarean sections (Table 1). Results showed clearly that majority of caesarean sections were performed on unbooked cases (67.07%) while 32.92% caesarean sections were done for booked cases.

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**DISCUSSION**

Primary caesarean section usually determines the future obstetric course of any woman and therefore should be avoided wherever possible. The caesarean section rate in our study was 21.40%. The rising caesarean section rate is a worldwide phenomenon although WHO states that there is no additional benefit associated with rising caesarean section rate of above 15%. In England caesarean section rate was 9% in 1980 which was raised to 21.3% in 2001. Haidar G et al from Hyderabad Pakistan and Shamshad from Abotabad reported caesarean section rate as high as 67.7% and 45.1% in 2007 respectively.11,12. The most common indication in our study was repeat caesarean section (22.76%). Lubna Ali from Karachi Pakistan reported repeat caesarean section as the risk of uterine rupture is low 0.3%-15. Successful vaginal birth after caesarean section (VBAC) in grand multiparous does not lead to increased maternal complication16,17.

The second most frequent indication observed in our study was failed progress of labour (18.29%). This was mainly due to mishandling by Daisies, 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 caesarean section(5.8%), fetal distress(3.5%) and caesarean section was 27.26% in primigravida and 24.1% in multipara21. Current research suggests that labour induction makes a caesarean section more likely among urgent indications of labour. A similar study from Sweden also shows no additional benefit associated with rising caesarean section rate of above 15%. In England caesarean section rate was 9% in 1980 which was raised to 21.3% in 2001. Haidar G et al from Hyderabad Pakistan and Shamshad from Abotabad reported caesarean section rate as high as 67.7%. The rising caesarean section rate is a worldwide phenomenon although WHO states that there is no additional benefit associated with rising caesarean section rate of above 15%. In England caesarean section rate was 9% in 1980 which was raised to 21.3% in 2001. Haidar G et al from Hyderabad Pakistan and Shamshad from Abotabad reported caesarean section rate as high as 67.7% and 45.1% in 2007 respectively.11,12. The most common indication in our study was repeat caesarean section (22.76%). Lubna Ali from Karachi Pakistan reported repeat caesarean section as the risk of uterine rupture is low 0.3%-15. Successful vaginal birth after caesarean section (VBAC) in grand multiparous does not lead to increased maternal complication16,17.

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**REFERENCES**

20. Good analgesia and proper fetal monitoring during labour.