ORIGINAL ARTICLE

An Analysis of Prevalence and Indications of Caesarean Section in Primigravida

ROMANA LATIF, SAIMA RAFIQUE, MARIA ASHFAQ, *TAHIRA YASMEEN, SAIMA JAVAID, NAJMA PERVEEN, ATTIYA RASHEED, ZAHIDA KALSOOM, MUNAZA BASHIR, SADIA CHAUDHRY, SALIM MALIK*

ABSTRACT

Background: Rate caesarean section(CS) is increasing worldwide. WHO recommended 5 to 15% appropriate CS rate Indications vary from country to country due to different social reasons, health care facilities and medicolegal aspect

Aim: To analyze prevalence and indication of CS in primigravida.

Place and duration: Study was conducted at Nawaz Sharif Social Security Hospital (NSSSH) Multan Road Lahore Pakistan during may 2016 to October 2016.

Methadology: This study was descriptive study. All patients underwent CS were included, all information were recorded in a specially designed proformaand rateand indications were calculated.

Results: Total CS rate was 81%. 30.87% patients were primigravida and 69.1% patients were multigravida. Most common indication was failure to progress and rate of obstructive labour was very low (0.47%)

Keywords: caesarean section. Primigravida. Multigravida.

INTRODUCTION

Caesarean section proved as a lifesaving procedure in obstetrical practice in cases fetal and maternal distress that is why it is the commonest and oldest obstetrical operation worldwide[1]. This surgical operation done for different indications in different countries. In developed countries where good health care facilities are available to all pregnant women like regular antenatal checkups, tonics, antibiotics, anesthesia, ambulances for immediate referrals and well equipped hospitals the indications of CS is influenced by request of painless delivery with epidural analgesia, continuous electrical fetal heart rate monitoring, fetal scalp blood sampling in cases of fetal hypoxia, surgeon`s busy schedule, litigation by insurance companies and long term follow up of children[3].

`WHO has given range of 5% to 15% caesarean section rate is ideal. CS done less than 5% under use of this beneficial surgical operation and more than 15% CS rate is not justifiable this shows liberal of this opportunity[2].

Pakistan is developing country with limited health care facilities i.e. hospitals, antibiotics, sterilization, ambulance services and safe anesthesia. All pregnant women are not getting equal antenatal care especially in rural areas. Traditionally people prefer to deliver at home by TBA (traditional birth attendant) and sometime by untrained persons. Very little number of women are going to BHU & RHU for antenatal care in remote areas. Although picture is different in urban areas. Rate of CS is also increasing in Pakistan but causes are different in from developed countries.

Our aim was to analyze the prevalence and indications of CS in primigravida, so that we can find out some preventable causes to reduce CS rate.

Department of Obstetrics and Gynaecology, Nawaz Sharif Social Security Hospital, Lahore Pakistan
Correspondence to Dr. Romana Latif
Email: romanaamir123@gmail.com

METHODOLOGY

This descriptive study was conducted in the department of obstetrics and gynaecology from may 2016 to oct 2016.in Nawaz sharif social security hospital multan road this is a tertiary care referral hospital for secured workers of different factories (low socioeconomical class) and receive referred patients from all over thePunjab including 40 despensaries, 4 primary and secondry care hospitals I.e.shahidra,kot lakh pat, shaikhupura and Raiwind, 24 hours in a week. We collected data from hospital record in a specially design proforma. Prevalence of CS and its indications in primigravidawere calculated.

RESULTS

1671 patients were delivered during 6 months out of them 1354 patients delivered by CS i.e., 81% 317 patients were delivered vaginally 19%. 288(68%) patients delivered by emergency CS and 130(32%) delivered by elective CS. 75% patients were referred case and 25%cases were our booked cases,out of

referred cases 90% delivered by emergency CS. 418 patients were Primigravida, the rate was calculated (30.8%) and 960 patients were Multigranida (69.1%). So prevalence of first CS was 30.87% and repeat CS was (69.1%). The most common indication was failure – to progress 93(31%), Second common indication was fetal distress 22%. These 2 indication constitute 53% of all causes of CS. Next common indications were failed induction in 60 patients (14%) and Malpresentation in 49 patients (11.7%). CS done for Hypertensive disorders in 35 patients (8.3%). Less common indications were patient's request 12 (2.87%) chorioamnionitis 9(2.1%), precious pregnancy 7(1.67%) and obstructed Labour 2(0.47%)

Table 1: Rate of CS

Primigravida	418	30.87%
Multigravida	936	69.1%

Table 2: CS rate in Primigravida

Emergency CS	288	68.8%
Elective CS	130	31%

Table 3: Indication of CS

Failure of progress	131	31%
Fetal distress	93	22%
Failed induction	60	14%
Malpresentation	49	11%
Hypertensive disorders	35	8.3%
Patient's request	12	2.87%
Chorioamnionitis	91	2.1%
Precious pregnancy	7	1.67%
Obstructed labour	2	0.47%

DISCUSSION

CS rate in our study is 81% which is very high, WHO recommended optimal CS rate 5 – 15 % (2), another study conducted in India shows CS rate 23.97%[4]. A study from China also shows high CS rate up to 54.90%[5]. A study by Haidar G et al from Hyderabad Pakistan shows CS rate of 67.7%[10]. This high CS rate in our study is most probably because of high referral rate from peripheral areas as NSSSH receives referrals from 40 dispensaries which are not well equipped for emergency and elective CS and repeat CS, because of less facilities of feto-maternal monitoring for VBAC (vaginal birth after CS) and increasing incidence of primary CS.

There were 418(30.87%) patients Primigravida and 936(69.1%) patients multigravida. The prevalence of CS is less than a study conducted in India which shows primary section rate of 41.99%[4] and 44.6% in Nigeria[3] this is because of the reason that we have a departmental protocol to give good trail of labour in primigravida after clinical pelvic assessment, estimation of fetal weight by ultrasound and clinically. We induce patients with cord around the neck instead of doing elective CS, we use partogram, intermittent fetal heart rate monitoring, early ARM (artificial rupture of membranes) in active phase of labour to detect meconium, careful selection of patient for elective and emergency LSCS. But a local study conducted at sharif medical complex Raiwind Lahore shows the same rate of CS in primigravida 30%[1], another case control study conducted in Saudi Arabia which is 32%[6].

In our study emergency CS were 68.8% and elective C Section were 31%,our emergency CS rate is high because We receive referred and high risk patients from all over the Punjab. Mostly low risk patients delivered at primary and secondary health care hospitals at Shahdra, Kot-Lakhpat, Raiwind and Shaikhupura only those patient who need specialist and immediate care, ICU and nursery care were referred to us that is why mostly patients landed in severe emergency and ended in emergency CS, our results of rate of emergency CS are comparable with an Indian study which showed emergency CS rate of 74.2%[4] and a local study At CMH Hyderabad showed the Em. CS rate 65.84%[7]. Another local study conducted by Saima Rafiq and Gul Raana shows Em. CS rate 20.4% and 37.3% which is lower than my study[8].

In our study the most common induction of CS was failure to progress 131(31%), which is again very high because most of these patient were un booked and referred and were not properly evaluated and selected. they were not augmented timely by syntocinon infusion and ARM (artificial rupture of membranes). Some cases were dai handled .This indication is 15 to 20% in a study conducted at Sir Ganga Ram hospital[8] and 18.8% in a study in Saudi Arabia[6] and 18.29% in Sharif Medical & Dental college.

Next most common indication was fetal distress 22%. This is because of late referrals from remote areas of Punjab, liberal use of PGE1 series which is easily available in Pakistan and cheaper drug. Malpractice by untrained person as TBA orally and S/L. Transportation delays because of lack of ambulance services. The rate of this indication is comparable to a study in Sir Ganga Ram Hospital 23.8% to 33.3%. Rate of fetal distress is 30% in Saudi Arabia[6]. A study in Mumbai shows 7.7% rate of fetal distress.

Another important indication was failure of induction which is 14%, as PGE2, is not radially available in our setup because of its cost and cold chain maintenance, we use PGE1, which is radially available in NSSSH. In our department repeat induction not done in routine because less fetal surveillance tools available e.g., continuous fetal

heart rate monitoring, fetal scalp sampling. Gynaecologist are not available 24 hours available they are on call, and this hospital deals with labour class patients and we have to face rigid and blaming attitude of attendants in case of complications. But this rate is only 2.9% in a study from Mumbai[9] and Government Medical College Latur India[4]. The rate of CS due to failed induction is 11.7% in a case control study in Saudi Arabia[6] which is comparable to our study.

In our study obstructed labour was very less 0.47% because we monitor our patients with partogram and we have good fascilities of emergency operation theaters and anesthesia coverage and 24 hours residential medical officers, Senior Registrars and on call consultant gynaecologist. The incidence is much higher 3.1% in India study at Latur[4] and 1.69% in local study in Sir Ganga Ram Hospital[8].

CONCLUSION

As prevalence of CS is increasing in primigravida women which will lead to increase the chances of repeat CS which is not risk free. Patients lost from hospital due to fear of repeat C Section and delivered by untrained people at home and mothers may die because of uterine rupture. Repeat CS is risk factor for placenta previa and morbidly adherent placenta which increase the chances of massive PPH and sever maternal morbidity and mortality. So there is need to reduce the rate of primary C Section. It also provoke me to have another study about the preventable causes of primary C Section. As Pakistan is developing country with less health care facilities, this increased morbidity and mortality increases the economical burden on country.

I also suggest to have social campaign about early booking at hospitals, training at BHU & RHU and TBA for antenatal care, categorization of low and high risk pregnancies and early Referrals for appropriate management. Malpractice of PGE1 medicine should be banned and should be only available to practitioners.

REFERENCES

1. Hafeez M, Yasin A, Badar N; et.al. prevalence and indications of caesarean section in a Teaching Hospital. JIMSA January-March 2014 vol: 27(1)pg
2. Chu K, cortier H, Maldonado F, et al. Cesarean Section Rates & indications in sub-Saharan Africa: A multi country study from medecins sans frontiers. PLOS one; September 2012 vol 7: (9)pg
3. Daniel C N, Singh S. Caesarean delivery, An experience from a tertiary institute in North Western Nigeria. MDCAN; 2016 vol 19 (1): pg (18-24)
4. Bade P, Kendre V, Jadhav Y, et al. An Analysis of indications for caesarean section at Government Medical College, Latur. International Journal of Recent Trends in Science and Technology; vol 11 (1): 2014 pg (6 – 8)
5. Liu Y, Li G, Ghen Y, et al. A descriptive analysis of the indication for caesarean section in mainland china. Bio Med Central; 12 December 2014 (14): pg 410.
6. Ahmed SR, A M, Aleesha, et al. Risks and indications for Cesarean Section in Primiparous women; A case control study. Annals of tropical medicine and public health; 3 June 2014 vol 6 (5): 541 – 544.
7. Baig JR, Jamal MM, Ashfaq T. A two year analysis of Cesarean Delivery at CMH Hyderabad. Scope Med; 2016 vol 66(5): 624 – 775.
8. Refique S, Raana G E. High Emergency Caesarean Section Rate – A comparison of indications in year 2005 and 2010. PJMHS July – September 2011 vol 5 (3): 489 – 491.
9. Katke RD, NA, Zarariya, et al. LSCS Audit in a tertiary care center in Mumbai:to study indications & risk factors in LSCS and its effect on early Peri-Natal morbidity and mortality rate. International Journal of Reproduction, contraception, obstetrics and gynaecology. December 2014 vol 3 (4): 963 – 968.
10. Haider G, Zehra N, Munir AA, Haider A, Frequency and indication of caesarean section in a tertiary care hospital. Pak J Med Sci;2009;25(5): 791-796.