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COMPARISON OF INDICATION, INCIDENCE AND COMPLICATION OF PRIMARY CAESAREAN SECTION IN PRIMIGRAVIDA AND MULTIGRAVIDA

Gynecology

Dr Sankhala Ravindra	Senior specialist (obstetrics & gynecology) Jaisalmer
Dr Verma Dheeraj*	Senior Specialist (medicine) kaanwatia hospital attached to SMS Medical College *Corresponding Author
Dr.Prerna Soniya	Post Graduate 3rd year (obstetrics & gynecology)
Dr Verma Kusum	Assistant professor (Obstetrics and Gynecology) Zenana Hospital attached to SMS Medical College
Dr Verma Asha	Senior Professor (Obstetrics and Gynecology) Zenana Hospital attached to SMS Medical College

ABSTRACT

Objectives-To assess and compare the incidence, indications and complications of primary caesarean section in primigravida and multigravida. Sample size-750

Method: The data were collected prospectively (from cases after applying the exclusion criteria),the deliveries that occurred between January 1 and December 31 2013 in the department of obstetrics and gynecology, and Zenana Hospital SMS Medical College,a large tertiary care municipal hospital in Rajasthan. All full term pregnancy patients admitted were examined thoroughly . The patients were watched in labor room with respect to fetal heart and progress of labor and indication for caesarean section was noted. All cases were attended by pediatrician .and then followed for at least 6 days for any complications.

Results-The incidence of primary caesarean section on primigravida and multigravida was 21.80% and 9.81% of total deliveries which contributes to 35.93% and 20.80% respectively.

Conclusion-From this study it can be concluded that the rate of primary caesarean section in the primigravida is increasing as elsewhere and is higher than multigravida and to reduce this rate,the first labor of women is to be well managed.

KEYWORDS

cesarean section, incidence, complications

Introduction-

Caesarean section is an operative procedure whereby an infant, live or dead is delivered through incisions on the abdominal wall and uterine wall after the period of viability.

A primigravidae is one who is pregnant for the first time[1] .A multigravidae is one who has previously been pregnant.She may have aborted or have delivered a viable baby[1].

Presently trend of PCCS(patient choice caesarean section) also called as CDMR (caesarean delivery on maternal request) is coming to avoid trauma to vagina and perineum[2].

Some caesarean sections are planned when a known medical problem would make labor dangerous for the mother or baby while others are done after labor has started i.e.taken as emergency.

The most common indications for caesarean section in primigravida and multigravida is fetal distress followed by cephalopelvic disproportion.Breech presentation and malpresentation contribute another group of common indication,malpresentations being the most common indication for primary caesarean section in multigravida. Abruptio placenta and placenta previa are more common in multigravida.

Various complications are associated with primary caesrean section.Intraoperative complications in primigravida include Extension of uterine incision and hemorrhage, Uterine atony and primary PPH, Bladder and urethral injury, GIT injury and anaesthesia related-difficult intubation, hypotension, mendelsons syndrome.Postoperative complications in primigravida includes PPH, Infections, Paralytic ileus, Anaesthetic hazards, Wound complications and intestinal obstruction.Intraoperative complications in multigravida includes extension of uterine incision and hemorrhage, uterine atony and primary PPH, bladder and ureteral injury.GIT injury and uterine inversion. Postoperative complications in multigravida includes-PPH, paralytic ileus, infections, anaesthetic hazards, wound complications, intestinal obstruction and thromboembolic disorders.

Even though people talk about the commercial angle, there also is the fact that cesarean section plays a great role in modern medicine. It has cut down both morbidity and suffering associated with births. The most important long term benefit of cesarean delivery is potential protection of the pelvic floor.

OBJECTIVES

To assess and compare the incidence, indications and complications of primary caesarean section in primigravida and multigravida.

MATERIALS AND METHODS

STUDY AREA-Study was conducted in the department of Obstetrics and Gynaecology, SMS Medical College, Jaipur.

STUDY DESIGN-Hospital based prospective, descriptive study

SAMPLE SIZE-

Total patients= 750

Out of 750, primigravida were 475 and multigravida were 275.

EXCLUSION CRITERIA-

1. Woman with non viable pregnancies
2. Women with previous history of LSCS
3. Women with rupture uterus
4. Women with ectopic pregnancy

Methodology-

In every case with an informed consent, age, name, address, detailed history and routine investigations with a special reference to parity, period of gestation, duration of labor, were noted. Each case was evaluated in detail about whether she had any antenatal checkups during this pregnancy, past obstetrics history which includes previous abortions, including MTP, premature delivery, still births, history of intrauterine death if any.

The patients were closely watched in labor room with respect to fetal heart rate and progress of labor. An indication for caesarean section was noted before the operation was done. At the same time it was also

mentioned whether operation was done immediately after the admission or after trial of labor. All cases were attended by pediatrician. Data were collected, tabulated systemically and then with the help of suitable statistics results were drawn.

Results and discussion

In table 1,the incidence of primary cesarean section on primigravida was 21.80% of total deliveries which contributes to 35.93% of total cesarean and that of multigravida was 9.81% which contributes to 20.80% of total cesarean section. The present series shows a higher incidence of primary cesarean section in primigravida if compared to Chayan roy choudhary (1999-2004)[3] 7.75% and Kolawole A.O.D. et al (2011)[4] 4.65% which because both the studies involve a large majority of rural and tribal population who still believe in extensive trial of labor at increased cost of maternal and perinatal mortality.

In our study (table2)fetal distress was the most common indication of primary cesarean section done on primigravida (32.21%)followed by cephalopelvic disproprtion(13.4%) and breech(12.73%). A.A. Sobande et al (1997) also stated fetal distress as the most common indication whereas in Adeleye(1982)[5] ,Otubu (1988)[6].Eke AC et al(2008)[7] series cephalopelvic disproportion was the most common indication followed by fetal distress. Similarly the most common indication of primary cesarean section im multigravida (table 3)was fetal distress(17.45%) followed by cephalopelvic disproportion (13.82%).Jacob stated cephalopelvic disproportion as the most common indication of primary cesarean section on multigravida whereas in klein(1963)[8],G Palanichamy(1965) and K.M.Bhatt(1981) stated antepartum hemorrhage as most common indication.In present study appearance of meconium stained liqor was most contributing factor for fetal distress,postmaturity and tight cord around the neck being other causes.

Table 6 shows that in caesarean section in primigravida there were 2 still birth and 13 were early neonatal deaths, common cause of still birth being fetal distress. Out of 73 babies admitted to NNW,13 died and 60 improved. In Kolawole[4] A.O.D series obstructed labor was responsible for 40% neonatal deaths and eclampsia accounted for 7.7% neonatal deaths only. And in multigravida there were 1 still birth and 11 were early neonatal deaths, common cause of still birth being placenta previa.

On comparing primigravida and multigravida,(table4) the incidence of atonic uterus was higher in multigravida which was 8.73% as compared to 5.89% in primigravida. No significant difference was found in intraoperative complications between primigravida and multigravida because complications depend on indication of ceasarean section and the procedure and not on parity.

Table 5 shows that the incidence of wound gape was significantly higher in multigravida i.e 6.18% as compared to 2.53% in primigravida. Obstetricians believe that higher incidence of medical and obstetric complications are usually observed in cases for cesarean section with increasing age and parity. The higher morbidity rate in multigravida probably indicates that the preoperative maternal condition like anaemia, malnutrition,etc. is responosible for higher postoperative complications.

CONCLUSION

The study revealed that more of primary caesarean section were done on rural population as emergency procedure. Still antenatal booking status are lower and early marriages and child bearings are prevalent. From this study it was concluded that the rate of primary ceasearan section in the primigravida is increasing as elsewhere and is higher than multigravida. Thus to reduce the rate of cesarean section the first labor of women is to be well managed. Though vaginal delivery is always safer than caesarean section, difficult vaginal delivery and obstructed labor carries higher morbidity and perinatal mortality when compared to elective caesarean section.

Today caesarean section is the most common obstetric operation performed and the advent of higher antibiotics, availability of blood transfusion facilities, anaesthetist skill, better surgical procedures have all made caesarean section more safer than before. Therefore early recognition of complications, timely intervention will decrease fetal loss and also improve pregnancy outcome.

Tables

TABLE 1

Incidence of caesarean section in the study

	Total number of patients delivered	Total number of C- section	Percentage of C-section
Primigravida	2179	475	21.80
Multigravida	2802	847	30.23

TABLE 2

Distribution of cases according to indications for primary C-section in primigravida

Indications	Total cases	Percentage
Fetal distress	153	32.21
Breech	60	12.63
CPD	64	13.4
Obstructed labor	39	8.2
IUGR	30	6.31
Abruptio placenta	9	1.89
Transverse lie	6	1.26
Cord prolapse	3	0.63
S.PIH	44	9.26

There are various other indications too.

Table 3

Various indications for primary Cesarean section in multigravida

Indication	Total cases	%
Fetal distress	48	17.45
CPD	38	13.82
Breech	28	10.18
BOH	31	11.27
Obstructed labor	18	6.54
Transverse lie	15	5.45
Abruptio placenta	35	12.73
Cord prolapse	4	1.45
S.PIH	25	9.09

There are various other indications also.

Table 4

Distribution of cases according to Intraoperative complications

	Primigravida		Multigravida	
Complications	Total cases	%	Total cases	%
Uterine atony & PPH	28	5.89	24	8.73
Bladder injury	10	2.11	4	1.45
PPH	6	1.26	8	2.91
Extention of uterine incision & hemorrhage	10	2.11	6	2.18

Table 5

Distribution of cases as per Postoperative complications

	Primigravida		Multigravida	
complications	Total cases	%	Total cases	%
Respiratory tract infection	28	5.89	20	7.27
UTI	14	2.95	11	4
Wound gape	12	2.53	17	6.18
Paralytic ileus	5	1.05	3	1.09
Post partum psychosis	2	0.42	1	0.36

Table 6

The perinatal mortality rate in primary cesarean section cases

	Primigravida	Multigravida		
Causes	Total cases	Per 1000 live births	Total cases	Per 1000 live births
Neonatal death	13	27.14	11	38.87
SB	2	4.18	1	3.53
Total	15	31.32	12	42.40

REFERENCES

1. Dutta D.C.Operative obstetrics: Hiralal Konar Editor. Textbook of Obstetrics,7th edition ,Calcutta: Central ,2004:p.95
2. Patient Choice Cesarean Section (PCCS): Look before You Leap, by Shelley Binkley on

february 27,2009
3. Chayan Roy Choudhary; cesarean births: the Indian scenerio-The analysis has been done on the women who had their last birth during 1999-2004.
4. Kolawale A.O.D.,Onwufuafua P,Adesiyun G,Oguntaya A,Mohammed-Duro A,All formerly of Ahmadu Bello University Teaching Hospital Kaduna(ABUTHK); now Ahmadu Bello University Teaching Hospital, Shika-Zaria;Australian Journal of Basic and Applied Sciences,5(6) :1088-1097,2011 ISSN 1991-8178:Audit of Primary Caesaerean Sections in Nulliparae seen in ABUTH Kaduna.
5. Adeleye.K.A. Obisean,1990,Delivery after Caesarean section.T.J of Obstet & Gynecol,8-14
6. Otubu,J.A.M.1988.Caesarean section.In Agboola A.(ed) Textbook of Obstetrica and Gynaecology for medical students.Vol 2,University educational services ltd publisher,11:218-231
7. Eke,Ahizechukwu,Chigoziem Department of Obstetrics and Gyecology,Nnamdi Azikiwe University Teaching Hospital Nnewi,Anambra State,Nigeria: THE PREGNANCY OUTCOME IN ELDERLY PRIMIGRAVIDA:FIVE YEAR REVIEW(2003-2008); table 2
8. Klein D,Rymonds R,Gabaeff L,Primary cesarean section in multipara.Am J Obstet and Gynecol 1963;87:242-52