Original article:

Incidence of labour following previous caesarean section: Assessment based study

[1]Dr Pallawi Singh , [2]Dr Hari Priya Roy

[1]MS, OB/GYN Asst. Professor, Department of OB/GYN, SKMCH , Muzaffarpur

[2] MS, OB/GYN consultant, Roy Nursing Home , Muzaffarpur

Corresponding author: Dr Pallawi Singh

Abstract:

Introduction: Each year, this century has set record rates of caesarean deliveries. Caesarean section is considered by many as the most significant intervention in childbirth. If the cost of a caesarean section is significant factor then, the cost of not doing one at the right time and in the right place is also equally significant.

Methodology : The main source of data for this study were patients who were handled in PHC's, CHC's, private nursing homes, untrained dais and referred to us for further management.

Results: Above table showing that out of 100 cases 47 % of cases underwent primary caesarean section in a government institute and 53 % of cases in non government hospital's (private clinics etc).

Conclusion : The mode of delivery should be decided depending upon the previous caesarean section indications, type of uterine scar, condition of the fetus and any associated maternal complications in the present pregnancy.

Keywords: LSCS , Pregnancy

Introduction

Each year, this century has set record rates of caesarean deliveries. Caesarean section is considered by many as the most significant intervention in childbirth. If the cost of a caesarean section is significant factor then, the cost of not doing one at the right time and in the right place is also equally significant. The justification of a caesarean section is difficult to prove, not only in economic terms, but also in terms of maternal satisfaction and fetal and maternal morbidity and mortality. [1]In India, the obstetric practice in urban viv-a-vis rural setting presents a glaring dichotomy, possibly due to lack of infrastructure in the rural sector.The caesarean section epidemic is a reason for immediate concern and deserves serious international attention as the concept of right of every child to be physically, mentally & emotionally "well born" is fundamental to human dignity. [2]With this view present study was planned to assess Incidence of labour following previous caesarean section .

Methodology

The main source of data for this study were patients who were handled in PHC's, CHC's, private nursing homes, untrained dais and referred to us for further management.

The study was a cross sectional study conducted among 100 women admitted in the labour room in the Department of obstetrics & gynecology of Sri Siddhartha Medical College & Research Centre, Tumkur, as per fulfilling the inclusion and the exclusion criteria's as mentioned below.

Simple size: 100 cases

Type of study: Cross sectional study

Inclusion criteria:

All term pregnant women with previous history of single uncomplicated lower segment caesarean section done for non recurrent indications with spontaneous onset of labour.

Exclusion criteria:

1. Women with any previous uterine scar due to myomectomy, hysterotomy operation and previous classical caesarean section , or scar due to previous rupture uterus repair.
2. Women with preterm premature rupture of membrane (PPROM).
3. Women with sepsis or chorioamnionitis
4. Women with intrauterine deaths.
5. Women with previous two or more lower segment caesarean section.
6. Women with induced labour.
7. Women with multiple pregnancies.
8. The cases in which informed and written consent are not obtained for this study.

Results and observations:

Present study includes 100 cases. A period of one and half years of study was undertaken. Their outcome of labor in post caesarean pregnancy was analyzed.

Table 1

Total no of delivery in hospital during present study (n=2430)	**Frequency**
Normal vaginal delivery	1545
Number of total LSCS	885
Number of primary LSCS	347
Number of patients in labour	867
Caesarean section in Post LSCS cases	80

From the above table, total number of deliveries, total number of caesarean section, total number of repeat emergency caesarean section, total number of primary caesarean section and total number of patients in labour following previous caesarean section observed during the time period of present study. The incidence of previous caesarean section cases is 9% among total LSCS cases.

www.ijbamr.com P ISSN: 2250-284X , E ISSN : 2250-2858

Table 2 SHOWING INCIDENCE OF LABOUR FOLLOWING PREVIOUS CAESAREAN SECTION BY DIFFERENT AUTHORS:

AUTHORS AND YEARS	TOTAL NO. OF DELIVERIES	TOTAL NO. OF PTS. FOLLOWING PREVIOUS C.S	INCIDENCE %
Wilson, 1951	-	-	1.50
Ghosh, 1973	95,719	1,022	1.07
Jeffcote	-	-	2.00
Douglas	1,10,375	2,377	2.10
Gogoi, 1982	4,556	110	2.60
Peel& Chamberlain	40,225	1,440	3.50
Sagar & Goyal	-	-	4.53
Present study	2,430	80	3.2

From the above table, the comparative incidence of labour following previous caesarean section in relation to total number of deliveries can be observed. Present study shows increase in incidence of labour following previous caesarean section.

Table 3 SHOWING TYPE OF DELIVERY OUTCOME WITH RELATION TO BOOKING STATUS IN THE PRESENT STUDY:

Booked or Unbooked case	Cases went for EmRCS	Cases went for VBAC	Total
Booked Cases	47	11	58
UnBooked Cases	33	09	42
Total	80	20	100

Chi square value: 7.23 p value: 0.001 Interpretation: Highly significant

Above table shows that there was statistically significant difference (p value: 0.001) between booking status of the cases and mode of labour outcome. As the maximum source of cases were mostly referred one from peripheral PHCs , CHCs, clinics etc to our hospital ..

www.ijbamr.com P ISSN: 2250-284X , E ISSN : 2250-2858

Table 4 SHOWING PLACE OF FIRST LSCS IN PRESENT STUDY:

Place of LSCS	No. of patients	Percentages %
Government institute (GI)	47	47.0
Non govt. institute (NGI)	53	53.0
Total	100	100.0

Above table showing that out of 100 cases 47 % of cases underwent primary caesarean section in a government institute and 53 % of cases in non government hospital's (private clinics etc).

Discussion

From the various studies done on post caesarean pregnancy conclusion made so far is that cases with post caesarean pregnancy has increased in recent times in .One of the important reasons may be that its more liberalized for maternal as well as fetal interest. Pregnant women with a prior section may be offered either a trial for VBAC or an elective or emergency repeat caesarean section.

In present study which was conducted in one of the tertiary referral centre of Tumkur, 100 cases of previous one caesarean section were studied, 52 % cases were booked at antenatal clinic and 48 % cases were un booked in our hospital.Out of 2430 patients who delivered in our hospital during the present study period of one and half years, 80 term patients had a history of a prior one LSCS, accounting for 5.17 % of the total number of patients (table 1). This incidence is comparable to the recent study by *Gonen* and colleagues, in which 5.8% of the total number of patients who delivered had a history of prior caesarean delivery.[3]

Our study is comparable to this study, with 20% of the patients delivering vaginally (table 10). However, *Gonen* and colleagues in their study reported 51.22% of patients delivering vaginally. *Chattopadhyay* and colleagues reported an incidence of 40% and *Pickhardt* reported an incidence of 42%. [4,5]

The probable reasons for the low rate of vaginal deliveries in our study were that, about 65 % of the patients were taken up for an EmRCS directly due to other obstetrical high risk factors and only 35 % of the patients who had a TOLAC, 57.14 % underwent successful trial after caesarean section and delivered vaginally. Our institution is a referral centre and we get a lots of referral cases from the peripheral health centers. Some of these cases were referred at such a point of time that we were not able to provide proper intrapartum care and had to intervene surgically in maximum cases (65%) by doing EmRCS directly to have better perinatal and maternal outcome.

Conclusion

The mode of delivery should be decided depending upon the previous caesarean section indications, type of uterine scar, condition of the fetus and any associated maternal complications in the present pregnancy.

www.ijbamr.com P ISSN: 2250-284X , E ISSN : 2250-2858

Bibliography:

1. Cirau-Vigneron N, Nguyen Tan Lung R, Elnack S, Barrier J. Evolution of the indication for cesarean comparison of 1971-76 and 1976-79 at the maternity centre of the Louis-Mourier Hospital. Review of the literature. J Gynec obstet Biol Reprod(Paris) 1985; 14(3): 375-84.
2. Kambo I, Bedi N, Dhillon B S,Saxena N C. A Critical Apprriasal of Cesarean section rates at teaching hospital in India. International Journal Gynecol and obstet 2002; 79 : 151-158.
3. Holmgreen G, Sjoholm L, Stark M. The Misgav Ladach method for cesarean section. Method description, Acta obstet gynecol scand 1999; 78 : 615-621.
4. Stark M, chavkin Y, Kupferszatain C, Guedz P, Finkel AR. Evaluation of combinations of procedures in cesarean section. Int J Obstet Gynecol 1995; 48 : 273-276.
5. Rodriguez AL, Porter KB, O'Brein WF. Blunt v/s sharp expansion of uterine incision in low segment transverse cesarean section. Am J Obstet Gynecol 1994; 171(4) : 1022-1025.