ORIGINAL RESEARCH PAPER
Volume - 12 | Issue - 08 | August - 2023 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

SCARRED UTERUS: COMPLICATIONS IN THE SUBSEQUENT PREGNANCIES OF TWO OR MORE CAESAREAN SECTIONS AND THEIR SOCIAL IMPLICATIONS

Obstetrics & Gynecology

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ABSTRACT

The world is witnessing an increase in the rate of Caesarean sections for the last couple of decades, giving the women an obstetric status of 'previous Caesarean section.' While the crucial lifesaving role of Caesarean section in modern obstetrics is evident, the potential adverse effects of high Caesarean section rates are less expressed. In this descriptive observational study, we assessed the frequencies and variations seen in intra-operative surgical complications, post-operative complications and immediate fetal outcome in 100 patients with previous two or more Caesarean sections in a tertiary care hospital. The social implications behind third or higher order pregnancies have also been studied. The most common intraoperative complication encountered was intraabdominal adhesions (25%) followed by impending scar rupture (13%). Intra-abdominal adhesions were most commonly between anterior abdominal wall and anterior surface of uterus. Significant blood loss was noted in 21% cases. The most common contraceptive used prior to the current pregnancy was barrier methods (75%) while 58% couples opted for tubal ligation along with the current Caesarean section. 6% couples did not opt for any contraception despite having multiple previous Caesarean sections. The risks associated with multiple repeat Caesarean sections are many, taking a toll on maternal health and fetal wellbeing. This study provides important information to counsel pregnant women with multiple previous Caesarean sections to know more about the complications associated with repeat emergency Caesarean section.

KEYWORDS

Previous Caesarean section, Intraabdominal adhesions, Scar rupture, Placenta accreta, Contraception

INTRODUCTION

The rising numbers of Caesarean sections in both developed as well as developing countries and the increasing predilection for it signifies growing medicalization of women's health. '*Once a Caesarean section always a Caesarean section*' may not stand true anymore but '*twice a Caesarean section always a caesarean section*' still stays put because of its high maternal and fetal complications. However, with advances in modern medicine (the introduction of antiseptics, anesthesia, safe suture materials, antibiotics, blood transfusions and standardization of surgical techniques), the outcomes have greatly improved, thereby increasing the spectrum of indications for performing caesarean sections.[1]

OBJECTIVES

To study the intraoperative and postoperative complications in women undergoing a Caesarean section after having undergone the same two or more times in the past.

To access maternal morbidity, mortality and fetal outcome in women undergoing a Caesarean section when they have had two or more Caesarean sections before the present pregnancy.

To study the social implications of unplanned third or higher order pregnancies.

Study design:

Descriptive observational study. Ethical clearance was obtained from the institutional ethics committee. All cases of previous two or more Caesarean sections who came to the labor room of a tertiary care hospital during the span of 18 months (January 2020 to June 2021) were included in the study after obtaining consent for the same.

Inclusion Criteria:

Multigravidas who have undergone previous two or more Caesarean sections

Exclusion Criteria:

Patients who have had previous one Caesarean section, patients who have undergone any gynecological surgery in the past, patients who have other surgical comorbidities.

Case histories of all patients were noted which included age, gravida status, parity, gestational age by LMP and sonography reports, socio-economic background, educational status of patient as well as her husband and details regarding usage and acceptance of contraception. Routine investigations were sent (CBC, blood group, RFT, LFT, HIV, HBsAg, HCV, BSL). Gestational age was confirmed with available parameters. Thorough clinical examination was done. Decision of emergency/elective caesarean section was taken based on clinical findings after consultation with senior faculty members. The surgeon was told to document each and every intraoperative finding which included present skin incision, access through abdominal wall layers, presence or absence of adhesions, techniques of adhesiolysis, integrity of previous uterine scar, method of delivery of the baby, location of placenta, presence of adherent placenta, technique of uterine closure, amount of blood loss, other organ injuries (bowel, bladder), hemostasis, abdominal wall closure and immediate postoperative complications along with neonatal outcome.

Statistical calculations:

The data collected was analyzed using SPSS Inc., (Statistical Program for Social Science Inc.) Version 16. Data was tabulated, compared, analyzed and interpreted using descriptive and inferential statistics based on the formulated objectives of the study. Quantitative variables were presented in terms of mean ± standard deviation. Level of significance denoted by P value was evaluated, where P value < 0.05 was considered statistically significant.

OBSERVATIONS AND RESULTS

This is a descriptive observational study carried out in the department of Obstetrics and Gynecology at a tertiary care center during a period of 18 months (January 2020 to June 2021). Data collected was compared, tabulated, analyzed and interpreted by using descriptive and inferential statistics based on the formulated objectives of the study. Descriptive statistics were done for all data and were reported in terms of mean values and percentages. Suitable statistical tests of comparison were done.

Table 1: Comparison between number of previous LSCS and intra-operative complications

Complications	Previous LSCS		P value
	2 (n=79)	3 (n=21)	
Uterine Rupture	10	03	0.84
Impending Scar Rupture	05	08	<0.001
Adherent placenta	02	02	0.21
Adhesions present	21	04	0.47
Difficult Uterine closure	06	05	0.63
Bladder injury	03	03	0.73
Bowel injury	00	00	-
Obstetric Hysterectomy done	04	03	0.61
Difficult Abdominal wall Closure	03	02	0.51

Table 2: Distribution of patients according to post-operative complications

Complications	Frequency (n=100)	Percentage
Hematuria	06	06.00%
Wound soakage	02	02.00%
ICU stay	07	07.00%
No complications	85	85.00%

Table 3: Distribution of patients according to acceptance of contraception

Acceptance of contraception	Frequency	Percentage
Not willing	06	06.00%
OCP	04	04.00%
Barriers	02	02.00%
TL	58	58.00%
Interval TL	30	30.00%

DISCUSSION

Caesarean section is the second most common obstetric operative procedure, after episiotomy. The cesarean delivery rate has increased for nearly two decades, resulting in steady decrease in the proportion of women achieving spontaneous vaginal delivery in the industrialized and developing countries throughout the world.[2]

Until now, there have been prior studies which focus on intra-operative complications in general, combining findings of previous one, two and more Caesarean sections. But here the study focusses specifically on previous two or more Caesarean sections in order to gauge the difficulties encountered in managing such cases in the operation theatre.

95% of the study population belonged to the age group 26-30 years of age. The mean age of the study participants was 27.25 ± 2.47 years. This signifies that even at a comparatively younger age, Indian women are becoming multigravidas. 79% of cases had previous two Caesarean sections while 21% had had previous three Caesarean sections. During the duration of this study, our institute did not witness any cases of four or more Caesarean sections. 97% cases began with a Pfannenstiel incision and access through abdominal wall layers was easy in 78% cases. In this study, the most common complication was adhesions (25% of all cases) out of which 84% were in cases of previous two Caesarean sections while 16% were in cases of previous three Caesarean sections; impending uterine rupture (13% of all cases) of which 38% were in cases of previous two Caesarean sections while 62% cases were in cases of previous three Caesarean sections; difficult uterine closure in 11% cases; obstetric hysterectomy was done in 7% cases; urinary bladder injury in 6% cases; difficult abdominal wall closure in 5% cases; adherent placenta was found in 4% cases and uterine rupture was encountered in 3% cases. It is a known fact that intra-operative complications are directly proportional to the number of previous Caesarean sections. Hence in this study, we have specifically concentrated on higher order pregnancies. Sometimes it can be said that a case of previous one Caesarean section can be more challenging than a case of previous two or more Caesarean sections! This study reported 86% live births with Apgar score at birth and 5 minutes being above 7, 2% cases of intrauterine fetal demise and 12% cases of either first or second trimester abortions. There were no deaths recorded in this study. Majority of patients belonged to Modified Kuppuswamy class III (65%) followed by class IV (35%), while 73% patients were educated. The most common contraceptive used prior to the current pregnancy was barrier methods (75%) while 58% couples opted for tubal ligation along with the current Caesarean section. 6% couples did not opt for any contraception despite having multiple previous Caesarean sections, the reasons being varied

The availability of government-sponsored health care is particularly important in India because the government provides subsidized or free health care. This finding is applicable to all poorly developed rural areas in India with limited access to health care. However, in addition to locally available and affordable services, the provision of culturally specific responses to obstacles in family planning utilization is critical to successful programs. While operating under the wide spectrum of national and state health policies, specific programs and reproductive health measures must definitely be modified according to the local and individual needs.[3]

CONCLUSION

With the advent of the 20th and 21st century, several maternal and child health related programs have been launched by the Government of India. However, their impact on reducing the number of Caesarean sections has been very little, or it can be said that due to improved facilities for pregnant women, we are able to diagnose high risk cases efficiently, thereby improving the rates of hospital deliveries. Doctors are able to diagnose fetal distress, placenta previa, cephalopelvic disproportion, abnormal placentation, etc. in turn increasing the number of primary Caesarean sections and repeat Caesarean sections too.

The best technique to reduce the multiple potential risks of repeat Caesarean section is to keep a check on the rates of primary and repeat Caesarean sections whenever possible. The aim is to improve ANC surveillance, nutrition status of pregnant women, literacy rates, per capita income of the family as well as standard of living to enable couples to discuss various contraceptive methods available to cut down family size.

This study provides important information to counsel pregnant women with multiple previous Caesarean sections to know more about the complications associated with repeat emergency Caesarean section. Also, information regarding contraception has to be imparted to every pregnant woman right from their first antenatal visit in their village subcenters/PHCs so as to avoid occurrence of higher order high risk pregnancies. We aim to make a sincere effort in improving the wellbeing of pregnant women in our country, thereby, moving a step forward in becoming a fully developed nation.

REFERENCES

1. T.Radhakrishnan,K.P.Vasanthakumari,P.K.Babu,Increasing trend of cesarean rates in India: Evidence from NFHS-4,JMSCR VOL/05/ISSUE//08//PAGE 26167-26176//AUG
2. C-section rates around globe at epidemic levels AP/msnbc.com. Jan.12,2010. Retrieved February 21, 2010.
3. Dharmalingam A., Morgan, S.P., 1996. Women's work, autonomy, and birth control: evidence from two south India villages. Population Studies 50 (2), 187–201.