International Journal of Clinical Obstetrics and Gynaecology

ISSN (P): 2522-6614
ISSN (E): 2522-6622

www.gynaecologyjournal.com
2019; 3(1): 66-68
Received: 11-11-2018
Accepted: 14-12-2018

**Dr. Pankaj Singh**
Associate Professor,
Department of Obstetrics and Gynaecology, MIMS, Barabanki, Uttar Pradesh, India

**Dr. Somya Singh**
Assistant Professor,
Department of Obstetrics & Gynaecology, MIMS, Barabanki, Uttar Pradesh, India

**Correspondence**
**Dr. Somya Singh**
Assistant Professor,
Department of Obstetrics & Gynaecology, MIMS, Barabanki, Uttar Pradesh, India

# A study of per operative findings in cases with previous cesarean section

**Dr. Pankaj Singh and Dr. Somya Singh**

**DOI:** https://doi.org/10.33545/gynae.2019.v3.i1b.11

**Abstract**
**Background:** Cesarean section is the commonest obstetrical procedure done worldwide. Increase in incidence of cesarean delivery has made it one of the commonest surgical procedure. In previous cesarean deliveries, repeated cesarean section is also increasing, this leads to an increase in various complications like adhesion, blood loss etc.; the scarring and adhesion formation is known to increase the major complications rate.
**Objective:** The present study was done to observe the per operative findings in repeat cesarean section patients, and to tabulate the surgical difficulties faced by surgeon during handling of such surgeries.
**Methods:** A prospective, observational study was conducted in the Department of obstetrics and gynaecology, Mayo Institute of Medical Sciences, Barabanki; after obtaining clearance from the institutional ethical committee. Total 100 cases of previous cesarean section were included for calculation convenience. Intra operative findings were recorded. The data was obtained in a semi structured performa.
**Results:** The most common indication for repeat cesarean section in the present study was fetal distress (18%); the maximum number of patients (85%) were having previous one cesarean section; and in most of them <500 ml blood loss was estimated. The most common adhesion pattern observed were bladder to uterus (28%) followed by parietal peritoneum to omentum (20%).
**Conclusions:** The incidence of adhesions, blood loss etc increase with repeated cesarean section; this further leads to increase in incidence of complications. To minimise the morbidity and mortality of the patients, repeat cesarean section should preferably be planned as an elective procedure.

**Keywords:** Cesarean section, blood loss, adhesions

## Introduction
A cesarean section delivery is a surgical procedure in which a foetus is delivered through an incision in the mother's abdomen and uterus [1]. Cesarean section is the most common obstetrical procedure performed worldwide [2], this surgical procedure is done often to save lives, and have a healthy mother and baby. In medical colleges and teaching hospitals in India the overall incidence of cesarean section is 24.4% [3]. And in a population based cross sectional study its rate varies from 20 -47% [4].
It is now much safer to perform with advancements in surgical technique, anaesthesia and patient care [2]. Incidence of cesarean section is continuously rising world-wide; coining a term "previous cesarean section". Previous cesarean section makes future obstetric procedures and abdominal exploration riskier. After any laparotomy, it is common to develop scar tissue or adhesions. This scarring and adhesion formation is associated with increase in major complication rate from 4.3 to 12.5%, depending on the numbers of previous cesarean section [5]. Uterine scar rupture, with adverse foetal and maternal outcome is also a major complication often encountered.
To perform cesarean section in the following pregnencies is a common mode of delivery [6], and incidence varies from 11% to 24% in cases of previous one cesarean section [7]. Previous cesarean section is a major indication for repeat cesarean section.[8].Aim of present study was to observe per operative findings in women undergoing repeat cesarean section, and to do analysis of surgical difficulties faced in women with previous cesarean section.

## Aims and Objectives
1. To determine the pattern of various types of adhesions seen, in patients with previous cesarean section.
2. To study the pattern of estimated blood loss, in cases of previous one cesarean section.

## Method

The present study was conducted at the Department of obstetrics and gynaecology, Mayo Institute of Medical Sciences, Barabanki, during the period of November 2017 to October 2018.After informed consent, case histories of repeat cesarean section were studied; and intra operative findings were recorded. Present method of performing cesarean section were unaffected by the study. Surgeons were specially requested to note about difficulties they faced while operating a case of previous cesarean section. Approximate blood loss was appreciated by soaked sponges and amount in suction jar.

Inclusion criteria - All patients with previous cesarean section, irrespective of number and type.

Exclusion criteria- All first-time cesarean section; women with previous abdominal surgery other than cesarean section.

The research work was approved by the Institutional Ethical Committee. Recorded data was analysed for findings in intra op, and also difficulties encountered.

## Results

**Table 1:** Parity of the women

| Parity | No. of Cases |
|---|---|
| Gravida 2 | 59 |
| Gravida 3 | 26 |
| Gravida 4 | 10 |
| Gravida 5 | 05 |

Maximum number (59%) of patients were gravida 2, followed by (26%) gravida 3.

**Table 2:** Estimated approximate amount of blood loss

| Amount of blood loss | Number of cases |
|---|---|
| < 500 ml | 66 |
| 500 ml to 1000 ml | 27 |
| >1000 ml | 7 |

In most of cases (66%) the estimated blood loss was < 500 ml. Blood transfusion was needed in 14 patients.

**Table 3:** Number of previous cesarean section

| No of previous C.S. | No of cases |
|---|---|
| Previous one | 85 |
| Previous two | 13 |
| Previous three | 2 |
| Previous four | 0 |

Most number of patients (85%) were having previous one cesarean section.

**Table 4:** Indication of cesarean section (most prominent):

| Indication of cesarean section | No. of cases |
|---|---|
| Scar Tenderness | 10 |
| Rupture uterus | 01 |
| Cephalopelvic disproportion | 14 |
| Foetal distress | 18 |
| Bad obstetric history | 04 |
| Ante partum haemorrhage | 04 |
| PIH | 07 |
| Breech presentation | 02 |
| Short pregnancy interval | 07 |
| Oligohydramnios | 09 |
| Post-dated pregnancy | 04 |
| Obstructed labour | 05 |
| Previous 2 LSCS | 13 |
| IUGR | 02 |

As shown in Table 4, most of the time indication for cesarean section was foetal distress (18%), followed by cephalopelvic disproportion. (14%).

**Table 5:** Variants of skin incision

| Skin Incision | No. of Cases |
|---|---|
| Transverse | 34 |
| Paramedian | 20 |
| Vertical | 37 |
| Paramedian to vertical | 04 |
| Transverse to vertical | 05 |

Vertical incision was given in most cases (37%), in 9% cases skin incision was changed from previous site.

**Table 6:** Type of Adhesions

| Type of Adhesion | Number of cases |
|---|---|
| Parietal peritoneum to anterior surface of uterus | 16 |
| Parietal peritoneum to omentum | 20 |
| Bladder to Uterus (Dense) | 08 |
| Bladder to Uterus (Loose) | 20 |
| Plaster abdomen | 07 |
| Omentum and bowel attach to uterus | 05 |

Intraperitoneal adhesions of various types were observed in most of cases, most common was bladder to uterus (both dense and loose) (28%), followed by parietal peritoneum to omentum. (20%). Due to adhesions and associated blood loss surgery becomes more complex and lengthy.

## Discussion

Cesarean section is the most common obstetric operative procedure world-wide. Multiple factors like medical, social and economical reasons has caused increase in primary cesarean section rate this leads to creation of new word "previous cesarean section" in subsequent pregnancies, giving a high risk pregnancy status to the subsequent pregnancies. With repeated surgical procedure these pregnancies became high risk pregnancies. In developing countries like India where antenatal care is often neglected and last moment referring to tertiary centre is high, these high risk pregnancies are managed as emergency cesarean section which is not ideal for them.

In present study most common indication for cesarean section was fetal distress(18%), followed by CPD (14%), results were similar to study by Rama Krishna Rao *et al*. (2)Repeated cesarean section is related to life threatening maternal complications when compaired to normal delivery and first cesarean section.

Repeated surgical procedure leads to formation of denser adhesions which not only makes surgery difficult and slow but also leads to much more blood loss. Repeat cesarion section also leads to increase in risk of placenta previa and placenta accrete. Present study concludes that this is need of hour that every case of primary cesarean section and her family should be educated about significance of antenatal care and try to convert following deliveries as elective procedure in place of emergency procedure.

## References

1. American college of obstetrics and gynaecology (2015). Cesarean birth (c-section). FAQ 006.retrieved June 1, 2016.
2. Mahale AR, Ghodke UP, Bhingare PE. Intraoperative difficulties in repeated cesarean section- A study of 287 cases. J obstet India. 2008; 58(6):507-10.

3. Kambo I, Bedi N, Dhillon BS *et al*. A critical appraisal of cesarean section rates at teaching hospitals in India. Int J Obstet. 2002; 79:151-8.
4. Sreevidya S, Sathiyasekaran BW. High cesarean rate in Madras (India); A population based cross sectional study. BJOG. 2003; 110:106-11.
5. Nisenblant V, Barak S, Griness OB *et al*. maternal complications associated with multiple cesarean deliveries. Obstet Gynecol. 2006; 108:21-6.
6. Tan WC, Devendra K, Tan As. Changing trends in indication of cesearean section in a tertiary hospital. Ann Acad Med Singapore. 2003; 32:299-304.
7. Notzon FC, Cnttingius S, Bergsio P *et al*. Cesarean section delivery in 1980s: international comparison by indication. Am J Obstet Gynecol. 1994; 170:495-504.
8. Anderson GM. Making sense of rising cesarean section rates. Time to change our goals. (Editorial) BMJ. 2004; 329:696-7.