



Perioperative Difficulties in Previous Caesarean Section and Their On Table Management

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Abstract

Introduction: Incidence of caesarean section is 30% of all surgeries. In recent times a woman with history of prior caesarean section becomes the most common indication of a repeat caesarean section especially when short interpregnancy interval is present.

Materials and Methods: It is an Prospective observational study done at Kamla Raja Hospital, Gajara Raja Medical College ,Gwalior from 2017 to2018 with the aim to study the perioperative difficulties in repeat caesarean section and manage them intraoperatively .Four hundred women with one or more caesarean section irrespective of age or parity were included.

Results: Maximum numbers of cases was between 20-29 years (91.25%).Out of 300 cases lower segment incision was given in 280 cases (70%). In 175(43.75%) cases there was difficulty in entering into abdominal cavity to reach the lower uterine segment due to various types of adhesions present between uterus and surrounding structures.

Discussion: Maximum complications were seen in age 20-29 and commonest complication being adhesions (37.5%), followed by scar dehiscence (14%), placenta praevia (3%), bladder injury (8%), adherent placenta praevia (1%) and casarean hysterectomy (0.5%).

Conclusion: Cases of caesarean section need to be educated about requirement of antenatal care, contraception, mode of delivery and timely referrals to tertiary centers.

Introduction

Incidence of caesarean section is 30% of all surgeries⁽¹⁾. In recent times a woman with history of prior caesarean section becomes the most common indication of a repeat caesarean section especially when short interpregnancy interval is present .Key in reducing mortality were:

- Antibiotics and anaesthesia advances
- Asepsis and vertical followed by low transverse caesarean section in 1912

- Suturing techniques and advancement in suture materials.

The mortality rate of caesarean was 20 per 1000,000 (ideal rate should be 15 % of total population.

Methodology

Observational prospective study carried from 2017 to2018 at Kamla Raja Hospital, Gajara Raja Medical College, Gwalior. The aim of the study

was to study the perioperative difficulties in repeat caesarean section and manage them intraoperatively.

Inclusion- All women with one or more caesarean section irrespective of age or parity

Exclusion- Other abdominal surgeries.

400 cases were taken after per abdominal examination, signs of rupture uterus and fetal heart rate .Decision of caesarean section was taken after evaluating above condition and per vaginal examination to see dialation, effacement of cervix, maternal condition and those refusing VBAC.

Table: 01 No of previous caesarean section and complication

No of prev CS	No of cases	No of complications	%
1	255	67	37.8%
2	125	18	21.8%
3	10	10	100%

Table: 02 Age wise

Age	No of patients	Percentage
<20	2	0.5%
20-29	365	91.25%
30-35	33	8.25%

Table: 03 Distribution according to Uterine Incision

Incision	No	%
Lower segment	380	95%
Inverted T	9	2.25%
Classical	1	0.25%
J Shaped	7	1.75%
Upper uterine	2	0.5%
uterine rupture	1	0.25%

Table: 04 Difficulty in Entering Abdominal Cavity and LUS

Adhesions	No.	%
b/w uterus and peritoneum	75	18.75%
b/w omentum and uterus	58	14.5%
b/wbladder and uterus	23	5.75%
Parietal peritoneum andomentum	19	4.75%

Table: 05 Post Operative Morbidity

	No	%
Anemia	110	27.5%
Wound infection	65	16.25%
Fever	60	15%
UTI	35	8.75%
Secondary haemorrhage	12	3%
Resuturing of wound	10	2.5%
Paralytic ileus	10	2.5%
Relaparotomy	3	0.75%

Table: 05 Indication of Caesarean Section in Previous Pregnancy

	No	%
CPD	115	28.75%
Fetal distress	76	19%
Eclampsia/GHTN	44	11%
Postdatism with NPOL	42	10.5%
APH	27	6.75%
Breech	22	5.5%
Failed induction	20	5%
Transverse	11	2.75%
Oligohydroamnios	20	5%
Short interval pregnancy	23	5.75%

Discussion

Age groups of patients for caesarean section were between 18-35years with most common 20-29 years. Maximum complications were seen in age 20-29 and commonest complication being adhesions (37.5%), followed by scar dehiscence (14%), placenta praevia (3%), bladder injury (8%), adherent placenta praevia (1%) and casarean hysterectomy (0.5%)

In our study patients who had repeat caesarean section their incidence was 37.8%.Study by Pushpa showed rate of caesarean section being 36.5%⁽³⁾ complication that were found peroperatively showed an increament with age which was similar to study by Jilam⁽⁴⁾ This was in contrast to study by Lisa J and Naye RL which suggested maximum women with complication being 30-35 years due to dysfunction in vascular endothelium which seemed to increase with age⁽⁴⁾ In our study commonest complication was adhesions 43% which was similar to study by Lyell which had 45%⁽⁵⁾. Adhesion between peritoneum and uterus was maximum followed by that between omentum and uterus which was similar to study by Wills and Nahar⁽⁷⁾ in the above cases adhesionolysis was done. Adhesion can be reduced by putting cellulose seprafilms adhesion barriers (sodium hyaluronase and carboxymethyl-cellulose) but large trials are going on. Adhesions are generally formed due to inflammations and infections. In our study patients with history of previous 3 caesarean sections had most amount of adhesion (100%) followed by haemorrhage complications like extension, adhesion, placenta

praevia and rupture uterus which were seen in patients with previous 2 caesarean sections. This was relatable to study by Farkund⁽³⁾ which showed thinned segment 16%, rupture uterus 1%, adhesions 35% and 2% increase rate of placental invasion.

Milosevic et al found 14.4% placenta praevia after 3 caesarean section, 5.4% rate after 2 caesarean section and 1.86% after 1 caesarean section⁽⁹⁾. Scar dehiscence and rupture was increased with increase number of caesarean sections. This was in coherence with study by Jatoi N which had 5% scar dehiscence in previous 3 caesarean section 4% in previous 2 caesarean sections⁽¹⁰⁾. In our study uterine rupture was seen in 8 patients out of which 6 were repaired and two patient underwent caesarean hysterectomy. This study was comparable with Ramakrishna Rao⁽⁸⁾ which showed 2.9 % rupture rate. In study by Shella's 0.5 % required caesarean hysterectomy⁽¹⁰⁾.

In our study 8% cases showed bladder injury which was tackled by suturing with vicryl in 2 layers followed by retrograde filling and catheterization for 14 days. Study by Nahar showed 6%⁽⁷⁾

In present study 12.6% haemorrhage rate was present owing to abnormal placentation, atonic uterus and adhesions. Incidence was more than that reported by Wuttikonsammit et al which was 6%.⁽¹¹⁾ It was treated by bilateral uterine and ovarian artery ligation. In others uterotonics, intrauterine packing and Bakri Ballon or intrauterine tamponade was instilled. Blood transfusion was done in anaemic patients or in those who required so. In our study commonest indication of repeat caesarean section was fetal distress followed by CPD. Repeat caesarean was associated with various maternal complication as compared to first caesarean section.^(12,13)

Conclusion

Cases of caesarean section need to be educated about requirement of antenatal care, contraception, mode of delivery and timely referrals to tertiary centers.

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