

A STUDY OF SHORT TERM (30 DAYS) WOUND COMPLICATIONS AFTER CESAREAN SECTION

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Abstract

Background: Wound infection is defined by the US center for disease control and prevention (CDC) as surgical site infection (SSI). which occurs within 30 days after a surgical procedure. Surgical site infection (SSI) following CS is a common cause of morbidity with reported rates of 3-15%. **Objectives:** To analyze the incidence of wound complications after elective and emergency cesarean section. To determine the incidence and causes of wound infection following elective and emergency cesarean section **Materials and Methods:** Prospective observational study is carried in the department of OBG, ACSR Medical College, Nellore from February 2020 to December 2020. All the women enrolled in the study underwent cesarean section both elective and emergency were observed for signs of wound infection within 30 days. Data collected included details of the wound infections as well as the risk factors. **Result:** Our study included 1050 patients undergone cesarean section in the department of OBG, ACSR Medical College, Nellore during February 2020-December 2020. In our study of 1050 cesarean section 126 cases developed wound complications which accounted for 12%. Emergency cesarean section 861 among 115 wound complications and elective cesarean section 189 among 11 wound complications (P= 0.039). Risk factors which contributed to the wound complications in this study are PROM(47%) Abdominal wall edema(27%) Anemia(15%) Diabetes mellitus(7%) and prolonged labour(4%). The commonest wound complication was superficial wound infection (58%), wound dehiscence (36%) and haematoma (6%). **Conclusion:** Knowledge of these risk factors would help the obstetrician in avoiding this complication by correcting anemia, diabetes and by avoiding prolonged labour. Prophylactic antibiotic in proper time and dose decrease postoperative wound complications. Superficial wound infection was the commonest wound complication which was treated by daily dressing and antibiotics. Whereas in wound dehiscence resuturing was done.

INTRODUCTION

Cesarean delivery is defined as the birth of a fetus through incision in the abdominal wall and the uterine wall after 28 weeks of gestation. It is an essential and most commonly performed surgery whose prevalence is increasing each year.^[1]

The WHO had recommended that this rate should be between 10 and 15% back in the 1980s but there has been an explosive rise in the rate of cesarean section performed around the world. In some countries, the current cesarean section rates can be in excess of 40%.^[2]

Wound infection is defined by the US centre for disease control and prevention (CDC) as surgical site infection (SSI). Which occurs within 30 days after a surgical procedure. Wounds are classified into one of the four categories: (I) clean, (II) clean-

contaminated, (III) contaminated, and (IV) dirty-infected.^[3]

Cesarean section (CS) rates have increased globally during the past three decades.

Surgical site infection (SSI) following CS is a common cause of morbidity with reported rates of 3-15%. SSI represents a substantial burden to the health system including increased length of hospitalisation and costs of postdischarge care.^[4]

The purpose of the study was to identify the factors contributing to wound infection following cesarean section performed in patients at a tertiary care hospital, department of OBG, ACSR Medical College Nellore.

Aims & Objectives

1. To Analyze the Incidence of wound complications after elective and emergency cesarean section.

2.To determine the incidence and causes of wound infection following elective and emergency cesarean section.

MATERIALS AND METHODS

Prospective observational study is carried in the department of OBG, ACSR Medical College, Nellore from February 2020 to December 2020 for Eleven months. All the women enrolled in the study underwent cesarean section both elective and emergency were observed for signs of wound infection within 30 days. Data collected included details of the wound infections as well as the risk factors contributing to infections like premature rupture of membranes (PROM), anemia, abdominal wall edema, diabetes and prolonged labour.

RESULTS

Present study included 1050 patients undergone cesarean section at the department of OBG, ACSR Medical College, Nellore during February 2020-December 2020.

Incidence of Wound Complication: In our study of 1050 caesarean section 126 cases developed wound complications which accounted for 12%.

Type of Cesarean Section: Out of a total 861 emergency cesarean section 115 developed wound

complications (13%) whereas out of 189 elective cesarean section 11(7%) developed wound complications.

Type of Wound Complications: The various types of wound complications seen in the present study are superficial wound infection; Superficial wound dehiscence and Haematoma without infections. The commonest wound complication was superficial wound infection (58%).

Risk Factors

The various risk factors which contributed to the wound complications in this study are PROM (47%) Abdominal wall edema (27%) Anemia (15%) Diabetes mellitus (7%) and Prolonged labour(4%).

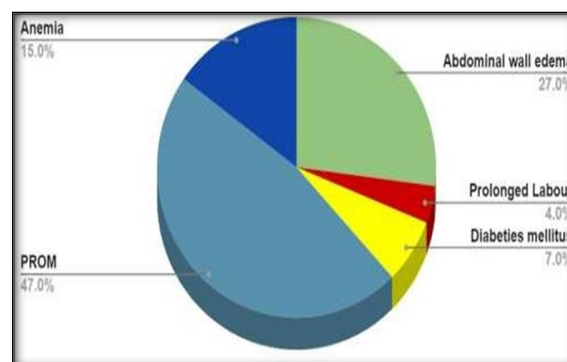


Figure 1:

Table 1:

Presentations	No of cases	Percentage (%)
Wound Complications	126	12
Wound normal	924	88
Total No of cases	1050	100

Table 2:

Type	No. of cases	Wound Complications (No. of cases)	Wound Complications (%)
Emergency cases	861	115	13
Elective cases	189	11	6

P value is significant (p=0.039)

Table 3:

Type of wound complication	No of cases	Percentage (%)
Superficial wound infection	74	58
Superficial wound dehiscence	45	36
Haematoma without infection	7	6

Table 4:

Characteristics	Total No. of cases	%
PROM	487	47
Abdominal wall edema	292	27
Anemia	159	15
Diabetes mellitus	77	7
Prolonged labour	35	4

DISCUSSION

The incidence of wound complication in our study is 12% and is correlating with the study done by Vjosa A Zejnullahu et al (9.85%).^[5] There was a statistically significant increase in wound complications among emergency cesarean section

cases (P= 0.039). Risk factors which contributed to the wound complications in this study are PROM (47%) Abdominal wall edema (27%) Anemia (15%) Diabetes mellitus (7%) and Prolonged labour(4%). Similar risk factors correlated with the study done by Tetsuya Kawakita et al.^[6] The commonest wound complication was superficial wound infection (58%)

whereas wound dehiscence (36%) and haematoma (6%).

CONCLUSION

Study was aimed to know the incidence of wound complications and associated risk factors. Wound complications after cesarean section in the study was 12%. Study conforms risk factors like PROM, Abdominal wall edema, Anemia, Diabetes mellitus and prolonged labour. Wound complications increased the duration of hospital stay which again increased the extra financial burden both patients and the hospital. Superficial wound infection was the commonest wound complication which was treated by daily dressing and antibiotics. Whereas in wound breakdown re suturing was done. Knowledge of these risk factors would help the obstetrician in avoiding this complication by correcting anemia, diabetes, and by avoiding prolonged labour. Using proper surgical technique can decrease the risk of wound infection. Prophylactic antibiotic in proper time and dose decrease postoperative wound complications.

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