

MATERNAL MORBIDITY AND MORTALITY IN CAESAREAN SECTION

(A Clinical Analysis of 350 Cases)

By

K. RAJURKAR AND M. SOOD

SUMMARY

Study includes 350 cases of Caesarean Sections among 3608 deliveries giving an overall incidence 9.7%. Elective Caesarean was done in 24.87% of cases and 75.2% had emergency Caesarean Section 37.5% of cases had morbidity. Wound Sepsis was predominant cause of maternal morbidity. Wound Sepsis, puerperal pyrexia and urinary tract infection was responsible for morbidity in one third of cases. Morbidity was high in cases of prolonged labour. Incidence of scar dehiscence was 4.9%. Morbidity was high among anaemic cases. 11.7% of cases had blood transfusion. Morbidity in emergency caesarean section was more than twice the morbidity in elective cases. 4.9% of cases had complications during operation. One case died due to atonic post partum haemorrhage giving an incidence of maternal mortality of 0.28%.

Introduction

With the advent of chemotherapeutic agent and better facilities for blood transfusion and anaesthesia maternal mortality for Caesarean Section has been reduced to almost nil in some centres especially in developed countries but maternal morbidity still remains high.

cal College, New Delhi during the period May, 1983 to February, 1984. There were 350 caesarean sections among 3608 deliveries giving an overall incidence of 9.7%. Majority of the cases were delivered by Lower segment caesarean section. Only two had classical section.

Observation

TABLE I

Total No. of Deliveries	No. of CS	Incidence (%)
3608	350	9.7

A study was conducted at LNJPN Hospital and associated Maulana Azad Medi-

From: LNJPN, Hospital & M.A.M. College, New Delhi.

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Wound sepsis was prominent cause of maternal morbidity. Wound sepsis along with puerperal pyrexia and urinary tract infection accounted for one third cases of morbidity.

TABLE II
Major Causes of Maternal Morbidity

Causes	Number	%
1. Wound sepsis	56	16.0
2. Puerperal pyrexia	37	10.35
3. UTI	20	5.75
4. PPH	6	1.7
5. Spinal hypotension	4	1.1
6. Burst abdomen	3	0.8
7. Paralytic ileus	3	0.8
8. Thrombophlebitis	1	0.28
9. Respiratory tract Infection	2	0.56
Total	132	37.5

In a few cases PPH spinal hypotension paralytic ileus, thrombophlebitis and respiratory tract infections were responsible giving an overall incidence of 37.5%.

In majority of the cases, prolonged labour more than 18 hours contributed to the high maternal morbidity. Most of these cases were unbooked and reported to the hospital late in labour with leak-

ing and were examined outside by dais. Other major causes were malpresentations CPD & APH.

In previous Caesarean Section cases morbidity was 16%. Primary Caesarean Section rate was about 6 times that of repeat Caesarean Section. Primigravida alone constituted about 46.5% of total Caesarean Sections.

TABLE III
Maternal Morbidity in Relation to Indication

Indication	Total cases	Morbidity	Incidence (%)
Prolonged Labour	32	14	43.7
Breech	28	10	35.7
CPD	26	9	34.6
Placenta Praevia	21	6	28.57
Accidental Haemorrhage	7	2	28.5
Cord Prolapse	7	2	28.5
Transverse lie	20	4	20.6
Fetal distress	79	15	18.9
Previous CS	50	3	16.0

TABLE IV
Frequency of Section in Repeat Section Cases

Total No. of repeat section	2 sections	3 sections	4 sections
50	32	17	1
Incidence (%)	64.0	34.0	2.0

TABLE V
Complications of Previous Caesarean Scar

Total No. of previous caesarean section—81		
	Number	Incidence (%)
Scar dehiscence	4	4.9

Scar dehiscence was found in 4 cases of repeat sections giving an incidence of 4.9%.

As the Table shows 4.9% had extension of uterine incision laterally, 11.1% had excessive hemorrhage and one patient required hysterectomy for atonic ppH.

Discussion

Although CS does not carry any significant mortality but maternal morbidity is still very high. In the present study it

TABLE VI
Distribution of Cases According to Hb Level

Hb in gm%	8	8-10	More than 10
No. of cases	46	283	21
% of CS	13.1	80.8	6.0
% Morbidity	42.1	19.8	3.2

Morbidity was highest in patients who were anaemic, 11.7% patients had blood transfusion. Out of these 9.7% had one unit and 2% had two units of blood transfusion.

TABLE VII
Morbidity in Emergency CS as Compared to Elective CS

	No.	%
Elective Operation	87	24.8
Morbidity	10	11.5
Emergency Operation	263	75.2
Morbidity	64	24.3

It was observed that morbidity in emergency CS was more than twice the morbidity in elective cases.

TABLE VIII
Major Operative Complications

Complication	No.	Incidence (%)
1. Extension of uterine incision	4	4.9
2. Hemorrhage	9	11.9
3. Hysterectomy for atonic PPH	1	1.2

TABLE IX
Maternal Mortality

Total No. of CS	No. of Deaths	Mortality	Cause of death
350	1	0.28	Atonic ppH

was 37.5%. These figures are comparable of those of Kistner (1951) 43.3%, Meizner (1981) 26.7%, Amirikia (1981) 28.5%, Munshi and Kotwani (1971) 54.4%.

The highest morbidity was due to wound sepsis including the stitch abscess. Majority of the cases who developed complications were anaemic and unbooked and came in prolonged labour.

Next common cause of morbidity was puerperal pyrexia (10.35%). Naidu reported an incidence of 10.4% and Munshi and Kotwani (1971), 20.7%.

In the present series incidence of Urinary Tract Infections was 5.45%. Highest morbidity was found in prolonged labour.

Maternal morbidity was more than twice in emergency CS (24.31%) as compared to elective CS (11.5%). Patek

(1978) from Sweden and Munshi and Kotwani (1971) from India also reported high maternal morbidity in emergency CS as compared to elective CS.

There was one death in the series giving an incidence of 0.28% maternal mortality. In 1981 Gupta reported an incidence of 0.95%. Sagar (1983), 0.35%. Markus (1982) from Canada reported no death in his series. Meizner (1981) from Israel reported no death in a series of 1000 CS.

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