

ANALYSIS OF 612 CAESAREAN SECTIONS

by

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The literature is full of extensive reports of caesarean sections from different institutions which clearly show a gradual but steady rise in its incidence. In this paper, we have analysed the caesarean sections done at Dr. R. N. Cooper Municipal General Hospital, Bombay over a period of 6 years. Ours is a peripheral multi-disciplinary municipal hospital started in 1970 and today offers services to the lower and lower middle-class suburban population in a large number of specialities and subspecialities.

Incidence

Out of total number of deliveries of 18,548 at Dr. R. N. Cooper Municipal General Hospital from 1970 to 1975, we performed 612 caesarean sections, giving an incidence of 3.29%. This is comparable with other reported incidences.

A generalised rise in the incidence of caesarean section over two decades is evident in the literature (Table II).

In our own institution also, a definite trend towards increased incidence of

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TABLE I

Authors	Incidence of Caesarean Section in %
McCormik	3.2
Naidu P. M.	2.8
Menon M. K. K.	2.1
Aptekar S.	3.4
Present series	3.29

TABLE II

Author	Year	Incidence (%)
Upadhyaya S.N.	1964	1.75
Parikh M. N.	1964	1.8
Peel J.	1955-57	2.4
Upadhaya S. N.	1957	4.34
Jackson I.	1961	7.5
Chakravarty R. K.	1967	6.27
Chakravarty R. K.	1971	7.5

caesarean section was observed (Table III).

TABLE III

Year	Total deliveries	No. of caesarean sections	% Incidence
1970	2165	52	2.4
1971	3788	84	3.0
1972	3122	100	3.2
1973	3250	104	3.2
1974	3345	115	3.4
1975	3878	157	4.1

The rise in caesarean section rate as well as in the total number of deliveries is apparent in this Table.

There has also been an increase in the number of unregistered and transferred cases during the period of study requiring immediate interference for both maternal and foetal salvage. This is perhaps responsible for the increased overall incidence of caesarean section in the later years.

Repeat Sections

In our series out of 612 caesarean sections, 91 were repeat caesarean sections giving an incidence of 14.9%.

TABLE IV

Year	No. of C.S.	No. of Repeat C.S.	Per cent
1970	52	4	7.7
1971	84	9	10.7
1972	100	13	13
1973	104	14	13.4
1974	115	16	14
1975	157	35	20

There is a steady increase in the repeat caesarean sections as the hospital established itself. This also corresponds to the increase in the admission of emergency cases as well as establishment of Bad Obstetric History and Diabetic Clinics.

Our incidence of repeat caesarean sections is compared with other Indian authors in Table V.

It is clearly evident from this Table that by 1975 our institution is on par with the leading centres in India.

Cephalopelvic disproportion, abnormal presentation and previous caesarean section constitute the largest group. Out of the trial of labour for cephalopelvic dis-

TABLE V
Repeat Caesarean Section as Reported
by Indian Authors

Authors	% of repeat C.S.
Roy	35.00
Poddar	23.05
Patwardhan and Motashaw	23.25
Narvekar	24.3
Menon M. K. K.	22.2
Present series—1971	7.7
—1975	20.0

TABLE VI
Indications

Indications	% C.S.
Contracted pelvis and C.P.D.	40.02
Abnormal presentation	19.2
Placenta praevia	9.8
Accidental haemorrhage	1.88
Cord prolapse	3.8
Cervical dystocia	1.8
Bad Obstetric History	4.6
Previous caesarean section	14.9
Miscellaneous	4.00

proportion only 28% went for caesarean section. In all the cases disproportion was confirmed both clinically as well as radiologically.

TABLE VII
Abnormal Presentations

Breech	30%
Brow	24.9%
Face	6%
Transverse	31%
Compound	8%

Over 90% of these cases were transferred from peripheral maternity homes late in labour. 80% of the breech cases were primiparae and 60% of the breech babies weighed more than 8 lbs. Another important point noted in this group of abnormal presentation was that, 28.2% of mothers were more than 30 years of age. 92% of cases of transverse lie were ad-

mitted to the hospital late in labour with severe foetal distress, 30% with Bandle's ring and hematuria and threatened rupture in 10%. Foetal loss was very high in this presentation, it was 94% of the total foetal loss (19 still birth) of this series.

Only 47% of placenta praevia cases admitted to this hospital underwent caesarean section and 70% of the operated cases were admitted as emergency cases in poor shape due to lack of blood replacement facility.

TABLE VIII
Anaesthesia

Anaesthesia	No. of patients	Per cent
General	401	65.52
Spinal	211	34.47
Local	1	0.01

Spinal anaesthesia was unsuitable as the majority of cases were with prolonged labour, dehydration, toxæmia or foetal distress with threatened rupture of uterus which are the associated problems of transferred cases.

TABLE IX
Type of Caesarean Section

Type of C.S.	No. of cases	Per cent
Lower section		
Caesarean section	605	98.9
Classical	7	1.1

Classical approach had to be resorted to in cases with marked adhesions, fibroid over the lower segment in the line of the incision. In all these cases tubal ligation was performed.

Maternal Mortality

We had 8 maternal deaths out of 612 caesarean sections, giving an incidence of 1.3%. Despite the fact that 439 sections

were performed as transferred cases with quite a few in bad condition, the maternal mortality is considerably lower than other Indian authors. Three patients died of haemorrhagic shock (APH), 3 died of pulmonary embolism, 1 had mismatched transfusion and 1 had cardiac failure. Seven maternal deaths occurred in patients transferred from other hospitals.

TABLE X
Comparison of Maternal Mortality

Author	% Maternal Mortality
Desdenhoff and Brill	nil
Marshall and Cox	0.69
Dumadin and Martin	1.82
Patwardhan and Motashaw	0.99
Aptekar	0.86
Purandare V. N.	2.3
Dass A.	2.7
Present series	1.3

Perinatal Mortality

Thirty babies were lost out of which 19 were stillborn, 8 died of asphyxia neonatorum and 3 had gross congenital malformation (Table XI).

TABLE XI

Authors	% Perinatal loss
Pedowitz	4.4
Bryant D.	7.6
Taylor	14.4
Dass A.	18.85
Patwardhan B. D.	9.9
Parikh M. N.	13.9
Purandare V. N.	4.6
Present series	4.7

Discussion

Increased safety of caesarean section has been instrumental to gradual replacement of the dangerous mutilating vaginal manoeuvres in obstetrics. Current literature shows a steady rise in the incidence

of planned as well as emergency caesarean sections. The increase in elective caesarean sections is due to improved diagnostic technique and the knowledge about the foetus at risk. There is also an increase in the post-caesarean pregnancies which are often subjected for operation. Previous caesarean has thus become an important indication for elective section in recent years.

The ultimate goal for an obstetrician is maternal and foetal salvage with early and easy recovery to normal health. Timely resort to this safer method of delivery than difficult vaginal manipulations has also contributed a lot towards reduction in maternal and foetal morbidity and mortality.

Summary

1. 612 caesarean sections performed over a period of 6 years at Dr. R. N. Cooper Municipal General Hospital, Bombay, are analysed.

2. There was a gradual increase of incidence of caesarean section from 1970 to 1975.

3. A large percentage of caesarean sections were performed on emergency cases.

4. Pelvic contraction, abnormal presentation and previous caesarean sections were the major indications.

5. 11% maternal mortality almost entirely from transferred cases admitted in poor general condition.

6. High perinatal loss of 4.7% out of which 94% from transverse presentation.

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