

CAESAREAN SECTION—A REAPPRAISAL*

By

HIRALAL KONAR, SIMA MUKHOPADHAYAY AND R. N. BHOWMICK

SUMMARY

A steadily rising caesarean section rate, in rural obstetric practice, (from 3.8% in 1965-68 to 17.8% in 1984-86) is the object for this review. Amidst so many variable factors, for pregnancy outcome, only by changing the method of delivery, outcome (perinatal mortality 125/1000 in 1965-'68 to 129/1000 in 1986 and maternal mortality from 2.2% in 1965-'68 to 1.6% in 1984-'86) has not changed. A reappraisal is made, to determine the measures that might improve the results.

Introduction

Presently, there is an increasing concern over the escalating use of caesarean section, (C.S.) performed by specialists in rural obstetric practice. Primarily C.S. has been accepted as one of the several factors responsible for improving the perinatal outcome. Caesarean section, performed in cases, of IUGR, breech-both at term and pre term, and also in cases of prolonged, infected or obstructed labour in rural centres, where neonatal care and other ancillary facilities are either poor or absent, often results in an adverse outcome. Although Craigin's old dictum, 'once a caesarean always caesarean' has been subjected to criticism, virtually little has changed in practice. "Caesarean section needs constant reappraisal and self criticism for the betterment of result"

(Roy Choudhury, 1968). With this objective, we have made a critical evaluation of caesarean delivery, to determine what measures might improve the result.

Materials and Method

The present study is a retrospective cross sectional analysis of 548 caesarean sections performed at N.B. Medical College Hospital, Sushrutanagar, during the period 1984-86. This rural medical college caters to all types of unbooked, neglected cases admitted as emergencies from far flung areas of rural northern Bengal, adjoining areas of Bihar, Assam, Sikkim, Bhutan, Nepal and Bangladesh. The present day results are compared with those of another author (Dutta, 1972), who worked over the same geographical area, dealing the same patient profile, during the period 1965-68.

Results

Incidence of C.S. in the present study was 17.83% as compared to 3.8% in Duttas' series (Table I). Emergency operations accounted for 86% of cases.

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From: Department of Obstetrics and Gynaecology, N. B. Medical College Hospital, Sushrutanagar, Darjeeling 734432.

TABLE I

	N.B.M.C. Hospital Sushrutnagar 1984-1986	Sadar Hospital Jalpaiguri 1965-1968
A. Incidence of C.S.	17.83%	3.8%
B. Incidence of Destructive Opns.	0.4%	1.2%
C. Emergency C.S. Rate	85.94%	86%

TABLE II

Indications for Caesarean Section (%)

	N.B.M.C. Hospital Sushrutnagar 1984-'86	Sadar Hospital Jalpaiguri 1965-'68
1. Repeat C.S.	21.35	14
2. Dystocia		
C P D	17.15	15.2
Malpresentation/Malposition—	12.22	9
Abnormal uterine action	9.48	19.3
3. A.P.H.	7.11	21
4. Hypertensive disorders of pregnancy	7.29	—
5. Fetal distress	6.75	—
6. B.O.H.	5.75	—
7. Post datism	3.64	6.3
8. Elderly primi	3.1	7.6
9. Others (Repaired V.V.F., Heart disease, Cord Prolapse)	6.38	7.6

Mean age for the women under-going C.S. was 25. Mean parity was 1.4 and mean weight of babies was 2.63 Kg. Repeat C.S. constitute (21.35%) the major indication (Table II) in the present study, as compared to APH (21%), which was the commonest indication for caesarean section in Dutta (1972) series. Diagnosis of fetal distress 6.75% and Cephalopelvic disproportion (C.P.D.) 17.15% were made solely on clinical examination. Analysis of maternal deaths (1.64%) in caesarean delivery has been made (Tables III and IV). Perinatal deaths in caesarean delivery were 129/1000 (Table V), of which 37.5% were still births. Incidence of destructive operations was 0.4%, as compared to 1.2% in 1965-68. (Dutta, 1972).

TABLE III

Maternal Deaths in C.S., N.B.M.C.H., 1984-'86

1. Shock and Haemorrhage	
Obstructed labour	— 2
Abruptio placenta	— 1
D I C	— 1
C.S. Hysterectomy	— 1
2. Septicaemia	
prolonged/obstructed labour	— 2
3. Pulmonary embolism	— 1
4. Cardiac arrest during anaesthesia	— 1
Total	— 9

TABLE IV

Maternal Deaths in C.S. (Comparative Analysis)

	Year	Rate (%)
1. N.B.M.C.H.		
Sushrutnagar	1984-'86	1.64
2. Sadar Hospital		
Jalpaiguri	1965-'68	2.2

TABLE V
Perinatal Deaths in C.S. (Comparative Analysis)

	Year	Rate (Per 1000 C.S. Births)
1. N.B.M.C.H. Sushrutnagar	1986	129
2. Sadar Hospital Jalpaiguri	1965-68	125

Comment

Variables affecting the outcome of pregnancy are so many that poor results could be due to factors other than method of delivery. Most of the patients had no antenatal care, prolonged duration of labour, several unhygienic examinations, prior to admission, and associated medical and surgical diseases contribute to the obstetric outcome.

Obstetric decision making is a factor that counts experience from observation of individual case analysis prospectively and also in retrospect. Willingness of the obstetrician to spend time with the patient is always credited. Active management of labour can reduce the incidence of C.S. and that does not prevent the achievement of low perinatal mortality rate. (Yudkin *et al* 1986). Diagnosis of C.P.D. is frequently imprecise; so also the fetal distress. Meconium, seems as both an indicator of fetal distress and a potential cause of neonatal distress, secondary to its aspiration. Density and colour of meconium in association with behaviour of fetal heart rate is more sinister significance rather than its mere presence. Hence clinical observation and its analysis in light of experience is important, until, scalp blood pH value is available to define with certainty of the diagnosis.

Caesarean section in breech fetuses, at term, preterm or in low birth weight cases

has not always improved the perinatal outcome (Green *et al* 1982). The fact that inherent risk of maneuver for extracting a breech by C.S. is no less than that associated with the delivery of a breech per vaginam. Traditionally repeat C.S. is performed almost always yet many series have shown that attempted vaginal delivery in presence of lower segment transverse uterine scar is both feasible and safe (Kala *et al*, 1986, Dayal, 1985). Destructive operations are still a viable alternative, specially in neglected and late cases, with dead or moribund fetuses, against fruitless C.S., to reduce much of the maternal mortality and morbidity (Dutta, 1987).

Training of post graduates and Junior specialists matter much. The surgical skill of Caesarean, with artful delivery of head, affecting a compression to the chest, to prevent aspiration, timely suction, before rushing to suture the uterus, needs training. Use of smallest possible Pfannenstiel incision to make Caesarean birth of breech fetuses very similar to its vaginal counterpart need expertise. The opportunity of a Junior Surgeon to have a senior one, as an assistant can only help these (Dhall, 1982). Perhaps more training with mannequins to demonstrate the maneuvers of vaginal breech delivery, Caesarean Section, manipulative obstetrics, destructive operations, are needed specially for rural Obstetrician, to work within limited resources.

From the facts analysed in this comparative study, the following conclusions can be drawn.

Conclusions

1. Outcome variables of pregnancy are so many that poor outcome could be attributed to factors, other than method of delivery. Comparative analysis showed

even by increasing about 5 times the incidence of Caesarean Section we failed to improve the maternal and perinatal outcome.

2. In a closely supervised training centre young post graduates and Junior Surgeons need individual case analysis prospectively and also in retrospect. Perhaps more training with mannequins to demonstrate the maneuvers of, vaginal breech delivery, caesarean section, manipulative obstetrics and destructive operations are needed.

3. Although, experience of one obstetric Centre can not necessarily be extrapolated to another, catering a different category of patients, it is certain that steadily rising C.S. rate, met in rural practice, should not be accepted as inevitable.

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