IS THIS CAESAREAN REALLY NECESSARY?

MOHAMMAD AURANGZEB AND LUBNA HASSAN

Department of Obstetrics and Gynaecology,
Postgraduate Medical Institute,
Lady Reading Hospital, Peshawar.

SUMMARY

Far too many Caesarean sections are being performed, as fewer doctors achieve the skills of obstetrics and resort more frequently to the ultimate obstetric answer—the Caesarean section. In an effort to reduce our Caesarean section rate, we undertook a prospective analysis of 97 patients who had previous one or more Caesarean section. 40 patients were unsuitable for a trial of labour. Of the 57 who underwent a trial of labour, only 27 achieved a normal vaginal delivery. Favourable factors leading to a normal vaginal delivery were previous vaginal delivery, particularly after a Caesarean operation, a vertex cephalic presentation and a maternal height of more than 5 feet. The use of Oxytocin and Prostaglandins may reduce the repeat Caesarean section rate.

INTRODUCTION

A certain increase in the Caesarean section rate (CSR) is inevitable with the increased facility for foetal salvage at an ever earlier period of gestation. The CSR must, therefore, be reflected in a decrease in perinatal mortality (PNM) and maternal mortality rate (MMR). In the west an increase in CSR greater than 15% did not show a corresponding fall in the maternal mortality or perinatal mortality.[1] A CSR greater than 15% cannot, therefore, be condoned.

The present day lower segment Caesarean section is safer than the classical Caesarean section regarding the risk of scar rupture. A vaginal delivery can be achieved in over half these cases without significant risk to either mother or foetus.[2]

The present day Caesarean section although safer, still has four times the maternal mortality when compared with vaginal delivery.[3] Despite the increasing tendency to allow a vaginal delivery after previous Caesarean section there have been no recorded deaths from scar dehisence in the past two reports on confidential enquiries into maternal deaths in England and Wales.[4]

The aim of the study was to analyse our primary and repeat CSR and so to ascertain what, if anything, could be done to reduce the repeat CSR, and to asses the obstetric outcome in patients delivering after a previous Caesarean section.

MATERIAL AND METHODS

A one year prospective study from Ist January 1991 to 31st December 1991 was conducted in Gynae "A" unit of PGMI, Lady Reading Hospital, Peshawar. Out of a total of 2836 deliveries, 547 were delivered by Caesarean section; 97 patients had a history of previous one or more Caesarean section. After obtaining a detailed history and examination of the patient, the obstetric outcome in each patient was noted. The patient and her newborn were followed up till the length of their stay in the hospital i.e. 5–7 days in those who had a Caesarean section and 24–48 hrs in those who had a spontaneous vaginal delivery. The study was observational in the sense that no active effort was made to influence the routine of the unit regarding the mode of delivery. Thus repeat Caesarean section was routinely performed in patients who had more than one previous Caesarean

section. Only those patients who had a history of one Caesarean section for a non–recurrent cause and no associated obstetrics and medical complications, were allowed a trial of labour. No oxytocin or prostaglandins were used.

RESULTS

97 patients out of a total of 2836 deliveries had a history of previous one or more Caesarean section. Of these 40 patients were considered unsuitable for a trial of labour; 22 patients had a history of previous two or more Caesarean section (2 had scar dehisence at the time of admission, 4 had a history of repair of ruptured uterus). The remaining 18 were excluded from the trial due to various obstetric and medical complications. (Table–1).

TABLE–1

NO TRIAL OF VAGINAL DELIVERY IN 18 (18.55%) CASES OF EMERGENCY CAESAREAN SECTION

Indication	No.	%
Neglected Transverse Lie.	6	6.18%
Placenta Previa.	4	4.12%
Prolonged Rupture of Membranes.	2	2%
Big Twins.	1	1%
Bad Obstetrical History.	1	1%
Gross Cephalopelvic Disproportion.	4	4.12%

Of the 57 patients who underwent a trial of labour only 27 patients i.e. 47.36% achieved a normal vaginal delivery,. Of the remaining 30 patients the trial had to be terminated in 14 cases because of foetal distress and in 26 cases Caesarean section had to be resorted to because of failure to progress, due to suspected cephalopelvic disproportion, thus giving an over all success rate of 47.36%.

Favourable factors leading to a normal vaginal delivery were previous vaginal delivery, particularly after a Caesarean section operation, a vertex cephalic presentation and a maternal height of > 5 ft (who had a vaginal delivery rate twice that of those who were < 5 ft tall i.e. 39.13% versus 17.64% respectively).

There were a total of 34 patients whose previous Caesarean section was for cephalopelvic disproportion (CPD) or failure to progress. 18 out of these 34 (52.94%) patients were able to achieve a normal vaginal delivery in our series (Table–2). An interesting revelation which is consistent with international trials.[5]

There were 3 cases of PPH (3.9%) all occurring in the Caesarean section group. In 2 of the cases (2.85%), the cause was uterine atony while in one case of PPH it was due to placenta accreta, where Caesarean hysterectomy had to be performed. Febrile morbidity (temperature being more than 100.4°F lasting for more than 48 hrs) occurred in 27 (27.83%) cases: 26 cases were from Caesarean section group and 1 was from the normal vaginal delivery group. Only 3 cases (11.11%) of the vaginal delivery group required blood transfusion whereas 66 (94.28%) of the Caesarean section group required blood transfusion. Other complications, all occurring in the Caesarean group are tabled in Table–3. There was no maternal death in either group.

Perinatal outcome of the two groups is given in Table–4. The overall incidence of Caesarean section in this series was 19.2% (547/2836). The incidence of repeat Caesarean section was 12.84% (70/547) during the year 1991. The incidence of vaginal delivery after previous Caesarean section was 47.36% (27/57).

DISCUSSION

This study shows the obstetric and neonatal outcome in patients who have

TABLE–2

COMPARISON OF VAGINAL DELIVERY GROUP WITH CAESAREAN DELIVERY GROUP IN RELATION TO MATERNAL MORBIDITY/MORTALITY

Complications	Vaginal Delivery (N = 27)		C. Section (N = 70)	
	No.	%age	No.	%age
Endometritis (Clinically foul smelling discharge P/V. Uterine tenderness)	9	(9.27)	9	(12.85)
Wound Infection	4	(4.12)	4	(5.17)
Pulmonary Complications (Productive Cough)	8	(8.24)	8	(11.42)
U.T.I (> 10^5/ML Colony Count)	5	(5.3)	5	(7.14)
Ileus	6	(8.57)	6	(6.2)
Cervical Laceration	Nil	—	—	—
Perineal Laceration	Nil	—	—	—
Mortality	Nil	—	—	—

had a previous Caesarean section. It also highlights the possible effects of different variables on the outcome.

Our primary CSR of 19.21% is high even by international standards.[6] But this, we must remember, is not the CSR of the country, which is probably very low. Most normal deliveries take place outside the hospitals in our setup; those who venture into the referral units for delivery are more often than not, already complicated at admission.

The repeat Caesarean section rate can only fall if the primary CSR decreases and a trial of labour is under taken with more of a commitment. Thus the fact that Oxytocin and Prostaglandins were not used at all in our series may well have accounted for some of the cases who had a failed trial of labour. Ramos et al reported a series in which they reduced the CSR from 19.5% in 1986 to 7.2% in 1989. The repeat CSR in the same study was reduced from 8% in 1986 to 3.3% in 1989.[7] Our incidence of trial of labour was 58.76% as compared to international studies of 69–70%[8] and our success rate in achieving vaginal delivery was still lower i.e. 47.36% versus 70–85%. [9,10]

Another reason for our failure to achieve greater success at vaginal delivery is the over cautious approach we have towards patients with more than one Caesarean sections, who routinely undergo a repeat section. Thus 22.68% of our patients were not allowed a trial of labour for this reason alone.

TABLE–3

OUT COME OF TRIAL OF VAGINAL DELIVERY IN PATIENTS WITH PREVIOUS C. SECTION FOR C.P.D./ FOETAL DISTRESS

Indication for previous C. Section	Total	Delivered	%
C.P.D.	34	18	52.94
Foetal distress.	8	2	25

TABLE–4

PERINATAL OUTCOME OF VAGINAL DELIVERY AND CAESAREAN SECTION GROUPS

Details	No. of Cases	Vaginal Delivery (N = 27)		C. Section (N = 70)	
		No.	%age	No.	%age
5 minutes APGAR > 5	12 (12.37)	1	3.7	11	15.71
Still born	5	1	3.7	4	5.71
Early neonatal deaths	12 (12.37)	1	3.7	11	15.71
Cord infection	10	—	—	10	14.28
Conjuctivitis	7	—	—	7	10
Bone injury	Nil	—	—	—	—
Skin lacerations	Nil	—	—	—	—

Poverty, ignorance and almost total lack of antenatal care force the women to seek medical advice too late if at all. The result is a higher than expected primary CSR with all associated complications of emergency surgery on ill prepared patients. The Caesarean scars are, therefore, probably, less reliable. Hence our reluctance to use oxytocin.

Two of our patients were admitted with ruptured Caesarean scars. Both had a history of previous two lower segment Caesarean sections and attempted vaginal delivery outside the hospital. A rise in CSR must correspond to a drop in maternal mortality rate and perinatal mortality. It is for indications such as APH, malpresentations like breech, and multiple pregnancies etc that there is great scope for decreasing the CSR.

CPD is probably over diagnosed; as in 107 patients who had their primary section for CPD 67.7% were delivered vaginally.[5] Even in our series, 52.94% of the patients whose previous Caesarean was for CPD achieved a vaginal delivery this time. It is, therefore, concluded that a trial of labour even if the primary section was for CPD is safe and rational, provided the patient is well monitored.

REFERENCES

1. World Health Organization. Appropriate technology for birth. Lancet. 1985; 2: 436.
2. Sachs BP, Brown DAJ and Driscoll SG. Maternal mortality in Masschusetts; Trends and prevention. N Eng J Med. 1987; 316: 667.
3. Biggs JSG. The place of Caesarean section in modern day Obstetrics practice. Proceedings of the 2nd International Congress in Obstetrics and Gynaecology, Peshawar, Pakistan 1983; 37.
4. Reports on confidential enquiries into maternal deaths in England and Wales (1979 – 1981, 1981 – 1984).
5. Porreco RP and Meiec PR. Repeat Caesarean Section – Most unnecessary. Contemp Obstet Gynaecol 1984; 21: 55.
6. Yudkin PL and Redman CWG. Caesarean section dissected, 1978–1983. Br J Obstet Gynaecol. 1986; 93: 135.

7. Ramos LS, Kaunitz AM, Peterson HB, et al. Reducing Caesarean sections at a teaching hospital. Am J Obstet Gynaecol. 1990; 163: 1081.

8. Phelan JP, Clack Sl and Diaz F. Vaginal birth after Caesarean. Am J Obstet Gynaecol. 1987; 157: 510.

9. Flamm BL. Vaginal birth after Caesarean section: Controversies, old and new. Clin Obstet Gynaecol. 1985; 28: 735.

10. Lavin JP, Stephen RJ and Moidovnik M. Vaginal delivery in patients with a prior Caesarean section. Obstet Gynaecol. 1982; 59: 135.