

**POSTCAESAR PREGNANCY IN RURAL MOTHERS
A REVIEW OF CONSECUTIVE 232 CASES**

by

D. C. DUTTA,* M.B.B.S., D.G.O., M.O., (Cal.)

With increasing incidence of primary caesarean sections more and more post caesarean pregnancies are met in day to day rural obstetric practice. Numerous papers have been published analysing various aspects of post caesarean cases but we are yet unable to come to an unequivocal conclusion to give a safe forecast or to formulate a standard scheme of management. In the perspective of the rural environment in which the primary caesarean sections are done, an analysis of the mothers having pregnancy following sections is considered worthwhile.

The materials of this paper were collected from District Hospitals at Jalpaiguri, Suri and Chinsurah of West Bengal and concern the years 1965 to 1973. During this period there were 232 post caesar cases out of a total confinement of 19,888 in the author's Unit, giving an incidence

section being 9.54% and that of post caesarean pregnancy being 2.38% in Eden Hospital, Calcutta.

TABLE I
Number of Deliveries Following Primary Caesarean Section

No. of Delivery	No.	%
Nil	186	80.2
1	30	12.9
2	10	4.3
3	6	2.6

In 186 (80.2%) there was no delivery following primary section. A similar figure of 72.6% was given by Hutabarat, *et al* (1974). Thus, while in majority the scar was not subjected by the stretching effect of pregnancy, in one out of five the scar was stretched by previous pregnancy.

TABLE II
Surgeon Performed the Primary Caesarean Section

Gynaecologist		Non-Gynaecological Surgeon		Author		Not stated		Total	
No.	%	No.	%	No.	%	No.	%	No.	%
123	53	60	25.9	32	13.8	17	7.3	232	100

of 1.2%. The number of primary caesarean sections was 745, giving the incidence of 3.8%. Konar and Lahiri (1973) mentioned the incidence of caesarean

In 25.9%, the primary caesarean section was done by Non-Gynaecological Surgeons. This bears a relation not only during assessment of the strength of the scar but results few avoidable, classical caesarean sections. In fact, a history of classical section was met in 4.7% (11 cases) of present series.

*Assistant Professor (Post Partum Unit),
Nilratan Sircar Medical College, Calcutta.
Accepted for publication on 13-4-1977.

TABLE III
Indications

	CPD	Prolonged labour	A.P.H.	Malpresentation	Misc.	Not stated	Total
No.	71	63	30	14	32	22	232
%	30.6	27.1	13	6	13.8	9.5	100

The indications of primary caesarean section are fast changing from recurrent to non-recurrent ones. A high prevalence of contracted pelvis is still met in rural mothers. It is evident from the above table that disproportion and prolonged labour were the principal indications of section being 30.6% and 27.1% respectively which was in contrast with that of 18.2% and 8.9% respectively given by Hutabarat, *et al* (1974).

The abortion rate is expected to increase following section more so when the incision is made low down. But beyond expectation there were only 5 cases of early abortion (2.2%) in the present series. There was 1 case of secondary abdominal pregnancy.

The neglect of rural mothers even in post caesarean pregnancy was evidenced by casual attendance in antenatal clinic by 57 (25.2%) in the series.

Methods of Delivery

While the dictum "Once a Caesarean always a Caesarean" enunciated by Craigin in 1916 is still upheld by many Americans, the majority favour mandatory hospital delivery and individualisation of the case. An incidence of abdominal delivery of 76.5% (173 out of 226) in the present series, is consistent with 75% in Eden Hospital, Calcutta (Konar and Lahiri 1973) though at variance with that of 41.1% (Caballero and Bravo 1967) or that of 62.8% (Rosario *et al* 1968). The obstetric problems dictating Caesarean Section are shown in Table IV.

TABLE IV

Obstetric Problems Dictating Caesarean Section

Indication	No.	%
C.P.D.	43	24.9
Malpresentation	19	11
Previous two sections	16	9.2
Bad obstetric history	17	10
Scar tenderness	9	5.2
Classical C.S.	8	4.6
Miscellaneous	21	12
Non-specific	40	23.1
	173	100

The reason for the increased incidence of repeat section is evident from the above table. In 23.1%, the sections were done without any obstetric abnormality apart from scar. Increased prevalence of primary section being done by gynaecological surgeons, inadequate personnel to watch during labour and an increased incidence of unwarranted scar rupture, to be mentioned shortly, lead to liberalisation of repeat section. Tubectomy done in 84 (49.1%) was an incidental advantage. Postoperative complications included shock in 2, (H/o cortisone therapy in 1 and anaemia with toxemia in 1), non-union of abdominal wound in 3 and burst abdomen in 2.

Vaginal Delivery

Fifty-three patients (23.5%) in the series, who came in labour, were allowed vaginal delivery. In spite of the fact that very few were allowed vaginal delivery and were very selective yet the

complications included retained placenta flabby. To detect any defect it is in 5, P.P.H. in 2 and shock in 1. wise to have hystero-graphy after 6

TABLE IV
Indication of Primary Caesarean Section in Vaginal Delivery Group

	C.P.D.	Prolong- ed labour	A.P.H.	Malpre- sentation	Misc.	Unknown	Total
No.	15	15	9	4	8	2	53

Fifteen cases where the indication of primary section was disproportion ended in vaginal delivery clearly emphasising the need for individualisation of the cases. Close observation during labour is imperative not only to note the progress of labour but to detect early evidence of scar dehiscence. The clinical features of scar giving way such as scar tenderness, bladder tenesmus, increasing pulse rate or vaginal bleeding are so vague that most often, if not all, the diagnosis proved to be wrong on laparotomy. It seems that the scar tenderness so often mentioned as the indication of section is an excuse for undertaking such decision. There is divergence of opinion as regards routine exploration of uterus following delivery to detect scar rupture. In the present series, routine exploration was not done and fortunately there was not a single case of scar rupture in vaginal delivery group. It is indeed difficult to detect any defect on scar by palpation when the lower segment is thin, soft and

months of delivery as advocated by Poidevin, (1965). None of the patients having vaginal delivery could be motivated for sterilisation in postpartum period.

Scar Rupture

Excluding abortion, there were 226 post caesarean cases and the scar gave way in 6 (2.6%). Amongst 11 Classical scars, 2 (18.2%) gave way in contrast to rupture of 4 lower segment scars out of 215 (1.9%). The diagnosis was made pre-operatively in only 1 case. There was not a single case of scar rupture in vaginal delivery group. Caballero and Bravo (April 1967) mentioned incidence of scar rupture as 3.9% (7.6% in C.S. and 1.3% in Vaginal delivery). Rasario and Das (1968) mentioned an incidence of 5% while Hutabarat, *et al* (1974) cited an incidence of 0.5%. Dewhurst (1957) cited an incidence of 2.2% and 0.5% in classical and lower segment scar rupture respectively.

TABLE VI
Foetal Outcome

	Prematurity		S. B.		N.D.		Perinatal Mortality	
	No.	%	Mat.	Prem.	Mat.	Prem.	No.	%
C.S. (173)	9	5.2	1 (Rupture)	2	0	3	6	3.5
Vaginal delivery (53)	8	15.1	3 (Macerated)	6	1	2	12	22.6
Total (226)	17	7.5	4	8	1	5	18	8

The overall prematurity rate was 7.5% (Weight less than 2,250 gms). This was much less than the 20.4% prematurity rate found in one of the rural hospital (Dutta 1974). The threefold increase of prematurity in vaginal delivery group over C.S. group was due to adoption of an expectant attitude in premature labour cases. The high perinatal mortality in vaginal delivery group was mainly due to increased incidence of prematurity and delivery of 3 macerated babies. Hutabarat, *et al* (1974) also mentioned an increased perinatal loss in vaginal delivery, being 8.7% as opposed to that of 6.4% in C.S. group. The overall perinatal mortality of 8% is much less than that found in one of the rural hospital viz. 14.6% (Dutta, 1974).

Maternal Mortality

There was no maternal death in the series. Caballero, *et al* (1967) mentioned a mortality rate of 1.2%, while Hutabarat, *et al* (1974) cited an incidence of 1.3% (2.8% in abdominal delivery and no death in vaginal delivery group).

Comment

Liberalisation of caesarean section in obstetric practice also extends to the

1. While the indication of primary section is fast changing from a recurrent to non-recurrent indication, in rural area contracted pelvis constitutes a major indication. (1/3rd in the present series).

2. Because of paucity of Specialist service, not infrequently section is performed by non-gynaecological surgeons. (1 in 4 in the present series).

3. Because of high perinatal and infant mortality rate, in significant number the scar is stretched by repeated pregnancies. (1 in 5 in the present series).

4. Although placed in high risk group, the antenatal care is paradoxically very meagre. (1 in 4 in the present series).

5. The incidence of scar rupture is not too low (2.6%) and mostly remain undiagnosed before laparotomy (only 1 case was diagnosed preoperatively).

6. In view of the above facts and considering the paucity of the ancillary services in the circumstances in which the mothers are placed it is probably pertinent to take liberal decision of C.S. (76.5% in the present series). A word of caution—being mentioned as high risk group in the indication of caesarean section—one should be guided by individual result.

TABLE VII

Maternal Complication in C.S. and Vaginal Delivery

	Adherent Placenta	P.P.H.	Shock	Burst abdomen	Maternal deaths
C.S. (173)	3 (Caesarean hysterectomy)	Nil	2	2	Nil
Vaginal delivery (53)	5 (Manual removal)	2	1	0	Nil
Total (226)	8	2	3	2	Nil

rural mothers resulting increase in incidence of post caesarean cases. The cases are to be viewed in a different perspective.

7. While constant vigilance is mandatory during labour to detect early evidence of scar dehiscence, the pitfalls of its symptomatology are highlighted.

8. Diversity of opinion still prevails on the issue of routine exploration following vaginal delivery.

Acknowledgement

I am grateful to the D. M. O. Sadar Hospital, Jalpaiguri, Suri and Chinsurah for their kind permission to utilise the hospital records.

References

1. Caballero, A. and Bravo, A.: *Acta. Ginae.* (Madrid), 17: 241, 1967.
2. Dewhurst, C. J.: *J. Obstet. & Gynaec. Brit. Emp.* 64: 113, 1957.
3. Dutta, D. C.: *Cal. Med. Jour.* 71: 18, 1974.
4. Hutabarat, H., Mochtar, R. and Aziz, A.: *Congress Proceedings, 6th Asiatic Congress of Obstet. & Gynaec. Kuala Lumpur Malysia, 1974.*
5. Konar, M. and Lahiri, D.: *Aggregate Statistics and Annual Report of the Dept. of Obstet. & Gynaec., Eden Hospital, Medl. College, Calcutta, 1973.*
6. Marcus, S. L. and Marcus, C. C.: *Advances in Obstetrics & Gynaec., Vol. 1. The Williams and Wilkins Co. Baltimore, 1967.*
7. Poidevin, L. O. S.: "Caesarean Section Scars"—Springfield? *Charls C. Thomas, 1965.*
8. Rasario, J. Pinto and Das, S. K.: *J. Obstet. & Gynaec. of India, 17: 530, 1968.*
9. Wolfst, J. R. and Rotter, A.: *Am. J. Obst. & Gynaec. 69: 1070, 1955.*