

PREDICTIVE VALUE OF INTRAPARTUM CERVICOGRAM IN PREVIOUS CAESAREAN SECTION CASES

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Introduction

The old dictum 'Once a caesarean section always a caesarean section' has been subjected to critical analysis by the Obstetrical world and it has been proved that it is possible to delivery many such cases vaginally.

In such problematic cases assessment of progress of labour by a cervicogram proves to be a dependable tool in the clinicians armamentarium. This is a simple method and avoids the risk of prolonged labour and scar rupture, and conservative approach can be maintained.

Material and Methods

This prospective study was carried out during the period of July 1981 to December 1983 in Sassoon General Hospital, Poona. During this period a total of 130 cases with history of previous caesarean section were admitted. Of these, 69 were subjected to repeat caesarean section because of recurrent indication. Eight patients came in advance labour and hence not included in this study. A total of 53 patients form the study group.

Detailed history particularly about previous caesarean section was obtained. Only those cases in whom definite indica-

tion and old records were available were taken for study. Thorough clinical examination and basic investigations were done. Intrapartum cervicogram was maintained for each patients. The latent phase was not considered. One hourly internal examination was done by the same person to know the cervical dilatation.

The graph was plotted with time in hours on X axis and cervical dilatation in cm on Y axis.

Alert and action lines were plotted on the same graphpaper using Philpott's criteria i.e. Alert line starting at 1 cm dilatation at 'O' hours and progressing at a rate of 1 cm/hr to full dilatation in 9 hours.

Action line was drawn 4 hours parallel and to the right of the alert line. If the dilatation curve crossed the alert line, the patient was reassessed and managed accordingly. If dilatation curve crossed the action line, interference in terms of repeat section was done. The initial dilatation rate (I.D.R.) was calculated on the basis of increase in the rate of cervical dilatation at the next vaginal examination, after the first record.

Average dilatation rate (A.D.R.) was calculated by dividing the total cervical dilatation achieved, by the time taken for it.

Labour was monitored carefully. Apgar score of babies were noted and

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babies were followed up until they are discharged.

Observations and Discussion

Total 130 cases had previous c.s. but only 53 cases were selected for trial of labour.

Of these 53 patients, 43 (81.43%) successfully delivered vaginally and 10 (18.57%) required repeat section as trial failed or had to be abandoned. These results coincide with the other workers Sarogi and Vaidya (1976) 62%, Goswami and Gogoi (1982) 66.7%.

Only one case of scar rupture was encountered during the trial (1.9%). Frequency of scar rupture in different studies is given:

1. Baker 1955	1.2%
2. Goswami and Gogoi 1977	4%
3. Sarogi and Vaidya 1977	0%
4. Merrill and Gibha 1980	0.76%
5. Present series 1981-83	1.9%

Parity does not have any remarkable effect on the outcome of trial.

Relationship of the alert and action lines to the outcome of trial

It was observed that majority of the patients who delivered vaginally (70%) had their curves on the left of the alert line and in remaining (30%) they either corresponded to or crossed the alert line. But in no case did the curve reach the action line (Table I).

The 10 patients who required a repeat section after failed trial had flattened curves. In 9 cases they crossed the alert line and of them 2 had also reached the action line. In these 2 patients repeat section was done. In 1 patient scar rupture developed when she was being shifted to operation theatre.

All the patients who delivered vaginally had A.D.R. more than 0.5 cm/hr. Of the patients in whom the trial failed 80% had IDR less than 1 cm/hr and all had A.D.R. less than .05 cm/hr. These results can be compared with Sarogi and Vaidya (1979) as seen in Table II. The

TABLE I
Correlation Between Alert and Action Lines and Vaginal Deliveries

S.N.	N.D.	Forceps	Total	Percentage
1. Left to alert line	25	5	30	70
2. Crossed alert line	9	4	13	30
3. Reacted action line	—	—	—	—
Total	34	9	43	

TABLE II

No. of cases	Rate of vag. del. %	Of the pts who delivered vaginally			
		IDR	1 cm/hr %	A.D.R. %	0.5 cm/hrly
Vaidya and Sarvogi	74	62	94	98	
Present series	53	81.53	93.33	100	

10 cases in whom trial failed the causes were borderline C.P.D. in 4, fetal distress in 2, inco-ordinate uterine action in 3 and rupture uterus in 1. All the babies were followed till they are discharged. Of the 53 babies born alive only 1 baby died (1.9%) due to prematurity complicated by septicaemia.

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