ELECTIVE PLANNED INDUCTION OF LABOUR (FOLEY'S CATHETER FOR CERVICAL RIPENING FOLLOWED BY FOREWATER AMNIOTOMY AND OXYTOCIN INFUSION METHOD)

by

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In elective planned delivery, the initiation of labour is achieved by artificial means at maturity 37 weeks onwards till term. Provided the cases are selected carefully, the delivery appears safe for both mother and foetus (Martin, Thompson, Pinkerton and Watson, 1978). Planned delivery does not jeopardise the mother or foetus when compared with spontaneous delivery, when careful patient selection is made by an experienced obstetrician. Besides the convenience of the obstetrician, it provides the opportunity to monitor all stages of labour, reduces I.D.I. and guarantees safety to both mother and foetus. Planned delivery has been the subject of much attention recently and ill-informed criticism, has been directed against it. Most of the patients, however, when carefully talked to can be brought around to accept this as a safe method of delivery.

Material and Methods

In our study, we have selected 100 patients at term including primiparae, multiparae and grandemultiparae (37 weeks of gestation onwards). We took:

(1) Obstetrically normal women which constituted the major group
(2) Bad obstetrical history patients
(3) Patients with pre-eclamptic toxemia
(4) Extended breeah presentation, and
(5) Previous scarred uterus.

In obstetrically normal women, planned induction was against the policy of non-intervention and anticipation of spontaneous onset of labour.

Method

Patients were admitted at term—maturity was clinically assessed and, in cases of unknown maturity, by study of amniotic fluid. Cervical scoring was done according to the Bishop score. The evening prior to planned induction, Foley's catheter (18 FG) was inserted extra-amniotically, transcervically and retained with 35 cc of normal saline overnnight. Patient was put on a broad spectrum antibiotic. On the following morning the catheter was deflated and removed if not already expelled during the night. Rescoring of the cervix was done. In case of fair improvement, ARM and oxytocin drip were started simultaneously after evacuation of the bowel. In cases with low score gain, ARM was postponed till desired and oxytocin drip started alone.

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Accepted for publication on 25-3-82.

Sr. No.		Primiparae	Multiparae	Grande-multiparae
1.	Number of patients	57	40	3
2.	Maternal age (years) mean ± S.D.	23. 1 ± 2.6	28. 5 ± 4.1	35. 0 ± 1.4
3.	Indications for induction of labour (No. of patients)			
	—Obstetrically normal	49	23	2
	—Patients with settled toxaemia of pregnancy	7	5	—
	—Bad obstetrical history	—	8	1
	—Scarred uterus	—	3	—
	—Extended breech presentation	1	1	—
4.	Gestational age at induction (weeks) mean ± S.D.	38 .7 ± 1.02	38.06 ± 0.96	38. 0 ± 0.80
5.	Unsatisfactory previous labour record (No. of cases)	—	11	1
6.	Pre-treatment cervical score mean ± S.D.	2.73 ± 1.51	3.20 ± 1.78	3.33 ± 0.47
7.	Post-treatment cervical score (mean ± S.D.)	8.19 ± 1.95	7.44 ± 2.28	5.33 ± 0.46
8.	Score gain (Mean ± S.D.)	5.17 ± 1.56	4.91 ± 1.83	2.33 ± 0.43
9.	No. of patients in spontaneous labour (percent)	5	6	—
10.	Induction delivery interval in patients in spontaneous labour (hours) Mean ± S.D.	9. 6 ± 1.52	6. 8 ± 1.83	—
11.	Induction delivery interval (excluding C/s) in patients who were induced with ARM and/or pitocin drip (Mean ± S.D.)	7.9 ± 4.23	5. 9 ± 1.72	8.67 ± 1.91
12.	Amount of 5% Dextrose (in cc) with pitocin used (Mean ± S.D.)	457.89 ± 221.2	293. 5 ± 121.1	350 ± 40.8
13.	Birthweight of babies (Lbs.) (Mean ± S.D.)	6. 5 ± 0.59	6. 8 ± 0.82	6. 3 ± 0.21
14.	No. of normal deliveries	46	32	3
15.	No. of forceps delivery (outlet)	8	3	1
16.	No. of caesarean sections	3 (5.3%)	5 (12.5%)	—
	For failed induction of labour	1	3	—
	For fetal distress	1	1	—
	For cord prolapse after ARM	1	1	—

In the majority of cases 2 units of pitocin/bottle (540 cc) was kept as standard and the rate of drip adjusted to the number of contractions/10 minutes-average three.

Results

Conclusions were drawn from clinical assessment and statistically derived results. The delivery was achieved in 57 primiparae, 40 multiparae and 3 grandemultiparae with various indications over 37 weeks gestation in 7.9 ± 4.23, 5.9 ± 1.72 and 8.67 ± 1.91 hours.

Results are tabulated as follows:

Five primiparae and 6 multiparae went into spontaneous labour with Foley's catheter alone and delivered normally.

Out of 100 patients, 46 primiparae, 32 multiparae and 3 grandmultiparae had normal vaginal delivery. In 11 patients outlet forceps were used and 8 patients underwent caesarean section. Notably, caesarean section was done in 6 patients because of poor post-treatment score, unsatisfactory progress of labour and foetal distress. Two patients underwent caeserean section for cord prolapse after amniotomy.

Discussion

Elective planned induction of labour at term in obstetrically normal patients has been proved to be the ideal obstetric management in recent times (Rajan and Ramani, 1981). It ensures safe and quick delivery with low perinatal morbidity. Its scope can be widened by including the cases who need strict supervision during labour.

In the present study, we included hospitalised patients with settled toxemias of pregnancy, patients with bad obstetric history and a few with breech presentation and previous scarred uterus. These cases were benefited with short induction delivery interval, under strict watch by the expert hospital staff during day time with added convenience to the senior obstetrician.

In patients with settled toxaemia, planned induction and a short labour reduced the perinatal loss. Patients with bad obstetric history were closely watched and no still birth or first week deaths were recorded due to timely intervention. In patients with breech presentation progress of labour following induction was monitored strictly with successful outcome. Cases with previously scarred uterus who were chosen for planned induction were given oxytocin infusion following ARM and strict watch maintained till they delivered vaginally.

Patients were mentally prepared for a short labour with assurance of negligible perinatal morbidity. Out of 100 mothers induced in our series, we did not lose a single baby. Neonatal pyrexia and hyperbilirubinaemia were not noteworthy. Maternal pyrexia was not noticed.

To sum up, in our study, planned induction with its wider range of indications has proved safe for both mother and baby.

References

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