# FOETAL OUTCOME IN POST DATE PREGNANCY

S. K. SANDHU • JASPAL SINGH • BIMAL DEEP • HARLEEN KAUR

#### SUMMARY

A prospective comparative study has been done on postdated pregnancies of two groups. Group I of 50 patients was treated conservatively till the onset of spontaneous labour and group II 30 patients was induced for post maturity. Maternal complications, foetal complications and foetal outcome have been compared.

#### INTRODUCTION

Post date pregnancy meaning pregnancy going beyond 280 days is an everyday problem for obstetrician and its management still remains controversial. Induction policy is traditionally used, because in general it is considered that the longer a truely post mature baby stays in uterus, the greater is the risk of a compromise (Schime et al 1984). On the other hand Hauth et al (1980) suggested that a practice of induction offers no extra advantage over expectant management. Present study is conducted to assess the risks of prolonged pregnancy in current obstetrical practice and outcome of a

conservative induction policy.

### MATERIAL AND METHODS

This is a prospective study of 80 cases of post-datism, admitted in S.G.T.B. Hospital / Medical College, Amritsar. Expected date of delivery was calculated by Naegle's rule and the patients who were not sure of the dates or who had history of irregular cycles or recent oral pill usage, were not included for the study. These patients were divided in two groups:

## Group I

Non-induced group in which patients who had no other complication of pregnancy but were just post dated, were

Dept. of Obst. & Gyn. Medical College, Amritsar. Accepted for Publication on 04.03.1994. treated conservatively till the onset of spontaneous labour.

## Group II

Induced group in which irrespective of any additional complication of pregnancy patients were induced just for postdatism.

Close clinical observations were made during the period of waiting for any evidence of foetal or maternal compromise and following clinical parameters were serially observed in antenatal period of group I patients.

- i) Daily foetal movements record by Cardiff count to ten method.
- ii) Maternal weight, B.P., height of uterus and amount of liquor.
  - iii) F.H.R. variations

Intranatal record of foetal heart rate variations and meconium staining of liquor in both the groups was made and foetal outcome assessed by noting:

- 1) Apgar score at 5 minutes
- 2) Foctal weight
- 3) Meconium aspiration syndrome
- 4) Perinatal mortality rate
- 5) Congenital anomalies of baby

## 6) Placental anomalies

### **OBSERVATIONS**

As shown in Table I out of 50 post-dated patients of Group I 100% patients went into spontaneous labour by the end of 43 weeks (8 by end of 41 weeks, 22 by the end of 42 weeks and 20 by the end of 43 weeks). Induction was done because of post term in 30 Group II patients out of which 10 were induced by 41 weeks, 13 were induced by 42 weeks and 7 by 43 weeks.

Out of 50 patients of Group I, 42 had normal vaginal delivery, 6 had LSCS - which was for foetal distress in 3 patients and for cervical dystocia in 3 patients. Two patients had forceps delivery - 1 for foetal distress and 1 for prolonged 2nd stage of labour. Out of 30 patients in Group II, 15 patients had normal vaginal delivery while LSCS was done in 9 patients and forceps was applied in 6 patients (Table II).

Rate of foetal complications in Group II patients of post date pregnancy was much higher (60%) as compared to Group I (24%). 8% patients of Group

Table I
Time onset of Labour

Period of gestation (Weeks)	Spontaneous labour		Induced labour	
renou of gestation (weeks)	No. of patients	Percentage	No. of patients	Percentage
41	8	16	10	33.3
42	22	44	13	43.3
43	20	40	7	23.4
Total	50	100	30	20

I had foetal heart rate variation, 12% had meconium stained liquor and 4% had shoulder dystocia. On the other hand foetal heart rate variation was present in 30% and meconium stained liquor in 30% of Group II patients.

Table IV shows that foetal outcome in both induced as well as noninduced patients was almost the same. 6% patients of Group I and 10% in Group II had babies with Appar Score less than 6, while it was more than 6 in rest of the babies. Foetal weight was more than 3.5 Kg in 2% of Group I patients while all of Group II' patients had foetal weight of less than 3.5 Kg.

Perinatal morbidity was 6% and 10% in Group I and Group II respectively.

### **DISCUSSION**

Rate of operative interference by caesarean section and forceps in the induced group was 50% and this is comparable with 46.7% reported by Gibberd (1982).

Table II

Mode of Delivery

Mode of delivery	Spontaneous group		Induced group	
wiode of derivery	No. of patients	Percentage	No. of patients	Percentage
Normal vaginal delivery	42	84	15	50
Forceps delivery	2	4	6	20
L.S.C.S.	6	12	9	30
Destructive operation	all a la Tun		ann Talla	10 10-20
Total	50	100	30	100

Table III

Foetal Complications in Intranatal Period

Complication	Group I		Group II	
Complication	No. of patients	Percentage	No. of patients	Percentage
Foetal heart variation	4.	8	9	30
Meconium stained liquor - Thin	4	8	6	20
Thick	2	4	3	10
Shoulder dystocia	2	4	<u></u>	TOTAL THINK
Total	12	24	18	60

P value < 0.01

Table IV
Foetal Outcome

Outcome		Group I		Group II	
Outcome		No. of patients	Percentage	No. of patients	Percentage
Apgar score - Less than 6 - More than 6	3	6	3	10	
	- More than 6	47	94	27	90
Foetal weight	- More than 3.5 Kg	1	2	_	_
	- Less than 3.5 Kg	49	98	30	100
Perinatal morbidity		3	-6	3	10
Perinatal mortality		-			_

But it is higher than 29% rate given by Finboe (1950). Operative interference rate of 16% in Group I patients compared well with the findings of Gibberd (1982) i.e. 17.8%. However, this rate is much higher than that reported by Ryosuke Nakano (1972) which was 6% in non-induced and 10% in induced group patients.

Rest of intrapartum foetal complications in the form of foetal heart rate variations, thick or thin meconium staining liquor and shoulder dystocia was 60% in Group II patients while in Group I patients only 24% patients had intrapartum foetal complications. This difference was statistically significant (P <0.01). Foetal heart rate variation was significantly more (30%) in induced as compared to 8% in non-induced postdated patients (Table III). These findings compared well with those of Beisher and Brown (1972) who found 50% rate of meconium staining in induced group patients. Knox (1979) reported 22% rate of meconium staining in both induced as well as noninduced patients of post

maturity.

Foetal outcome was almost same in both induced as well as noninduced group patients i.e. 92.5% babies of noninduced group and 90% babies of induced group were born with Apgar score of more than 6. Perinatal mortality rate was zero in both the groups. But Gibberd (1982) reported perinatal mortality rate of 1.25% in the induced group patients. Perinatal morbidity rate of 6% in noninduced and 10% in induced group patients was almost same as that of 7.8% non-induced and 6.7% in induced group patients reported by Gibberd (1982). Hauth (1980) reported no statistically significant difference in perinatal morbidity of both induced and non-induced group patients.

Therefore this prospective study clearly shows that there is no gain by induction just for post-datism and at the same time the foetal complication rate and caesarean section rate is statistically significantly more than in patients in whom conservative management is done.

Foetal outcome in the form of perinatal

mortality and morbidity remains identical in both the groups. But for postdatism patient needs hospitalization, a close watch for foetal and maternal complications and stringent supervision during labour.

#### **BIBLIOGRAPHY**

- Beisher and Brown: Obstet. & Gynec. Surv.: 27;303;1972.
- 2. Finobe: Acta Obstet. & Gynec. Scand, 30, Suppl. 1, 1950.
- Gibberd D.M.F.: Brit. J. of Obstet. & Gynec.: 89;292;1982.
- 4. Hauth: Obstet. & Gynec.: 56;467;1980.
- Knox GE: Am. J. Obstet. & Gynaecol.: 134;376;1979.
- 6. Ryosuke Nakano: Acta. Obstet. & Gynec. Scand.: 51;217;1972.
- 7. Shime: J. Obstet. & Gynec.: 148;547;1984.