Induction of labour – The current trend in a tertiary care hospital

Kaur S¹, Kawthalkar A²

Abstract:

¹Junior resident ²Associate Professor Department of Obstetrics and Gynecology NKPSIMS and Lata Mangeshkar Hospital, Nagpur, Maharashtra , India sarab2123@yahoo.com

There is a rise in number of induced labour in modern obstetrics. Improved fetal monitoring helps in detection of compromised foetuses necessitating induction of labour. Caesarean section rate is more with induced labour as compared with spontaneous labour. Hence there is a need to evaluate current trend of induction of labour.

Keywords: Labour, Induction, Indications.

Introduction:

Aim of intrapartum care is healthy mother with a healthy baby. Induction of labour means initiation of uterine contractions (after the period of viability) by any method (medical, surgical or combined) for the purpose of vaginal delivery. Induction is done when the risks of continuation of a pregnancy either to the mother or fetus is more. The major disadvantages of induction of labour over spontaneous labour are iatrogenic prematurity and increased rate of caesarean sections as there is absence of phase of prelabour in such patents. Prelabour is a premonitory stage which may begin 2 to 3 weeks before the onset of true labour in primigravida and a few days in multigravida and includes lightening, cervical ripening and appearance of false pain(1-2)

Aim of Study

- 1. To study the indications of induced labour.
- 2. To study the outcome of induction of labour.

Type of Study

This is a Retrospective Study

Material and Methods:

Evaluation of Data of deliveries of last 3 months was done from files obtained from record section. Women requiring induction of labour were included in the study.

Observations:

About 6.5% of deliveries in last 3 months were induced labour (33 out of 502 deliveries). Out of these 33 patients, 21 (64%) patients were induced with Prostaglandin E_2 gel, 10 (30%) with Foley's catheter and 2 (6%) patients were induced with oxytocin (Figure 1).

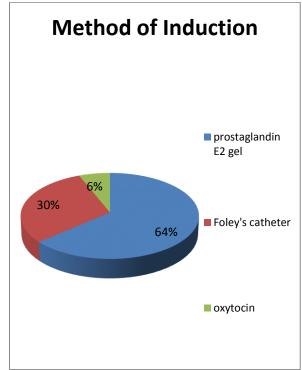


Fig 1: Method of induction used in patients (%age)

Most of the patients (63.63 %) belonged to the age group of 21-25 years. 18.18 % patients were 26-30 years old. Majority of patients (75.25%) were nulliparous. 57.57% patients belonged to gestational age of 40-42 weeks and 21.12% patients had gestational age of 37-40 weeks. The commonest indication of induction was Post datism (50%) followed by Oligohydramnios (13.88%), IUGR (12.12%) and PROM (5.55%). Some patients had more than one indication for induction (Table 1).

Table 1: Various Indications of induction of Labour

S.No.	Indication of induction	No of cases	%age			
1	Postdatism	18	50 %			
2	Oligohydramnios	5	13.88 %			
3	IUGR	4	12.12 %			
4	PROM with low	2	05.55 %			
	bishops score					
5	On patients request and	2	05.55 %			
	social reasons					
6	Postterm	1	2.77 %			
7	PIH	1	2.77 %			
8	Severe PIH with	1	2.77 %			
	HELLP syndrome					
9	Eclampsia	1	2.77 %			
10	IUD	1	2.77 %			
11	BOH(Bad obstetric	1	2.77 %			
	history)					
12	Polyhydramnios	1	2.77 %			

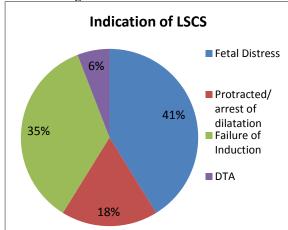
54.54% patients delivered vaginally while rest required caesarean section (Table 2).

Table 2: Mode of Delivery

Mode of Delivery	Number of Cases		
Vaginal delivery	18 (54.54 %)		
LSCS	15(45.46 %)		
Total	33(100 %)		

The commonest indication for caesarean section was fetal distress (41%), followed by failure of Induction (35%) and Protracted/ Arrest of dilatation (18%). One patient underwent caesarean section for deep transverse arrest (Figure 2).

Figure 2: Indications of LSCS



One patient had postpartum gastroenteritis while in rest of the patients postpartum period was uneventful. Only one baby required NICU admission for exaggerated jaundice. There was no neonatal mortality.

Discussion:

The most common Indication of Induction was Postdatism which was similar to other studies. Other indications were similar to those observed in other studies (Table 3).

Table 3 Comparison of Indications of induction in different Studies

Indications of	Name of study and number of patients			
Induction	Buist et	Rijal P	HayatT	Present
	al	et al	et al	study
	Year of	2008	Year	
	2000stu	study	of2000	
	dy	-	study	
Postdatism	26 %	62.8 %	9 %	50 %
Oligohydramnios	-	0.3 %	-	13.88 %
IUGR	12.3 %	0.7 %	4 %	12.12 %
PIH	26.5 %	18.7 %	18 %	8.31 %
PROM with low	8 %	3 %	10.5 %	05.55 %
bishop's score				
On patients	2 %	1 %	27 %	05.55 %
request and social				
reason				
Postterm	-	-	-	2.77 %
IUD	-	0.7 %	14.5 %	2.77 %
BOH	-		-	2.77 %
Polyhydramnios	-	0.7 %	5 %	2.77 %

In our study 45.46% patients underwent LSCS which was similar to that observed in a study conducted by Rijal et al (Table 4).

Table 4: Rate of LSCS in different studies

Name of Study	LSCS Rate
Buist et al (1)	21.6 %
Rijal et al (2)	47.2 %
Hayat T et al (3)	24.5 %
Present study	45.46 %

Conclusion:

Present study concludes that 6.5% of labours at our institute were induced labours. Post-datism was the commonest indication of induction of labour and caesarean section rate was 45.46%. As caesarean section is more in induced labour, there is a need for judicious use of induction of labour.

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