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RESEARCH ARTICLE

COMPARATIVE STUDY OF 25 µgm S/L vs. P/V MISOPROSTOL IN INDUCTION OF TERM LABOUR

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Abstract

Misoprostol is effective at inducing labour.There are not enough data from randomised controlled trials to determine the best route to ensure a successful and safe outcome. Reasons for induction include being overdue, pre- labour rupture of membrane and high blood pressure.

Introduction:-

Induction of Labor means deliberate termination of pregnancy beyond 28 weeks. Induction of labor near term is required in 10-20% women. A successful induction of labor leads to vaginal delivery of a healthy baby in an acceptable time with minimum maternal discomfort or side effects. Labor induction with misoprostol has become an intensely investigative topic. This comparative study is undertaken to evaluate the safety & efficacy of sublingual & vaginal route of administration of misoprostol for induction of labor.

Misoprostol is the most fascinating synthetic prostaglandin PGE1 analogue with excellent efficacy, minimal side effects and cost saving benefits. Unlike oxytocin ,misoprostol is effective in an unripe cervix. Unlike Dinoprostone gel, misoprostol is stable at room temperature and cheap.Its administration needs no special expertise.

Aims & Objectives:-

To compare efficacy and safety of sublingual and vaginal 25 µgm misoprostol for term labour induction.

Primary outcome measures:-

1. Number of patients delivering vaginally with in 24 hrs. of induction.

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2. Patient's acceptability for the same mode of administration.

Secondary outcome measures:-

1. The interval of induction to delivery
2. Number of doses of misoprostol
3. The incidence of meconium stained liqour
4. Number of caeserian deliveries
5. Number of hyperstimulation.
6. Maternal adverse effects
7. Neonatal outcome
8. Oxytocin augmentation required

Materials & Method:-

It is a prospective study. It was conducted in department of OBGY CHC Manawala, Amristar from June 2015 to June 2016. Misoprostol 25 µgm. 100 pregnant women were randomized. 50 women were given sublingual 25 µgm misoprostol and 50 women were given pervaginal 25 µgm misoprostol, every 3 hrs for maximum 3 doses.

Inclusion criteria:-

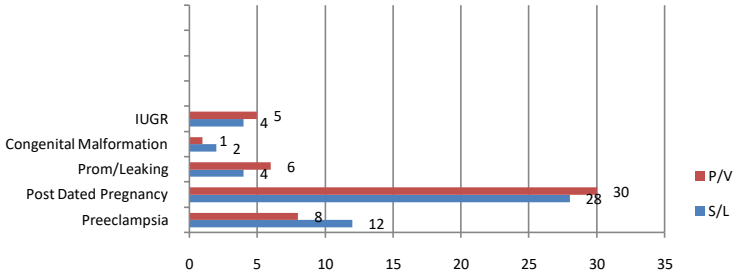
1. Singleton vertex pregnancy.
2. Obstetrics indication for induction like preeclampsia, P.R.O.M etc.
3. Gestational age > 37 wks
4. Bishop score < 8
5. No CPD
6. Nulliparous & Multiparous women(parity<5)
7. Reassuring FHR

Exclusion criteria:-

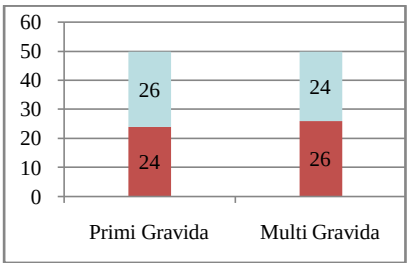
- **Presentation other than cephalic**
- **Previous section**
- **H/O glucoma, CV Diseases, renal , Metabolic & endocrine diseases & Hypersensitivity to misoprostol**
- **Vaginal bleeding**
- **Grand multiparity**

Distribution Due To Indication For Induction Of Labour

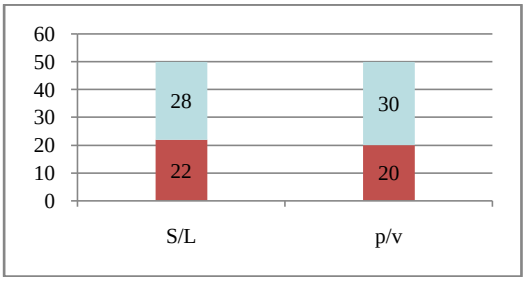
	S/L		P/V	
Preeclampsia	12	24%	8	16%
Post dated pregnancy	28	56%	30	60%
PROM	4	8%	6	12%
Congenital Malformation	2	4%	1	2%
IUGR	4	8%	5	10%



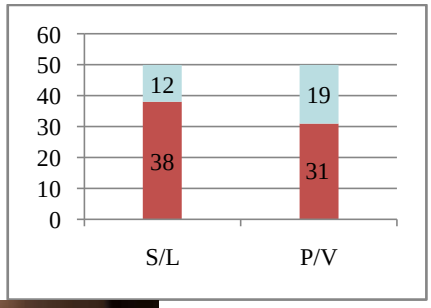
DISTRIBUTION OF CASES ACCORDING TO				
GP	PRIMIGRAVIDA		MULTIGRAVIDA	
	No. of cases	**%**	**No. of cases**	**%**
S/L	26	52%	24	48%
P/V	24	48%	26	52%



DISTRIBUTION OF CASES WITH RESPECT TO MEAN GESTATIONAL AGE				
GA	S/L		P/V	
	No. of cases	**%**	**No. of cases**	**%**
Term (37-40wk)	22	44%	20	40%
Post term (>40)	28	56%	30	60%
Total	50	100%	50	100%



LIQOUR CHARACTERISTICS				
	No. of cases	%	No. of cases	%
Clear	38	76%	31	62%
Thin	4	8%	6	12%
Thick	8	16%	13	26%
Total	50	100%	50	100%



Conclusion:-

1. Misoprostol is safe and effective cervical ripening and labour inducing agent when used either vaginally or sublingually
2. Induction delivery internal was significantly shorter with S / L misoprostol as compare to P/V misoprostol.
3. Sublingual misoprostol required less oxytocin & fewer doses of MP
4. The incident of tachysystoles and hyperstimulation is higher in vaginal misoprostol
5. Sublingual misoprostol had better acceptance.
6. Gross difference was found in mode of delivery, maternal group &neonatal outcome

Take Home Message:

1. Misoprostol effectively induces labor.
2. In low socioeconomic country like ours, misoprostol is cheaper than others and stable at normal temperature.so it can routinely used for induction of labor.

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