

ABSTRACT

INTRODUCTION : Human labour is a complex process and is characterised by the onset of effective uterine contractions leading to progressive effacement and dilatation of the cervix that result in expulsion of fetus, placenta and membranes. Although most of the patients have a spontaneous onset of labour at term, on some occasions the labour has to be induced for several reasons. The aim of induction is to achieve a successful vaginal delivery. Maternal side effects should be minimal. Baby should be born in good condition.

AIM OF THE STUDY : To evaluate the efficacy of isosorbide mononitrate versus Dinoprostone gel in cervical ripening at term and compare the maternal and fetal outcome.

MATERIALS AND METHODS : Methods of collection of data: Study design: Randomized Comparative study, Prospective Study. Study period: 6months Sample design: Simple Random Sampling Sample size: 60 Inclusion Criteria Low risk group GA 37 weeks or more of pregnancy High risk group DM/HTN/IUGR Single gestation Cephalic presentation Reactive fetal heart rate pattern Obstetric indications for induction Post dated pregnancy Preterm PROM Term PROM Hypertensive disorder- Preeclampsia Eclampsia Chronic Hypertension Oligohydramnios RH Isoimmunisation The study subjects was randomly assigned into 2 groups of 30 cases each. Group 'A' – received T.Isosorbide mononitrate 40 mg intravaginally repeated every 6th hrly according to Bishop score. Group 'B'- received Dinoprostone Gel 0.5 mg Intracervically repeated every 6th hrly according to Bishop score maximum of 3 doses.

RESULTS : Mean age are similar in both groups (24.87 in PGE2 group and 24.13 in study group) p value 0.375 statistically not significant. Primi gravida was 53.33% in PGE2 group, 56.67% in IMN group. Multigravida was 46.67% in PGE2 group and 43.33% in IMN group. Parity index was comparable in both groups. P value 0.924 statistically not significant. Mean Bishop score after 12 hrs was 4.33+0.57 in PGE2 group, and 5.63 + 0.51 in Study group. The mean gestation in the present study was 40weeks 3 days which was comparable. The mean induction delivery was 20.36 hrs in present study. In IMN group, 5 cases were delivered after single dose of tablet Isosorbide mononitrate and 20 cases were delivered after 2 doses and remaining 5 cases needed 3doses for delivery. The babies with Apgar <7 for one minute score in Pallavi study was 0% , 11.7% in PRIM study. In our study apgar score for < 7 for one minute was only 1 cases (3.3%) 6 cases had Maternal hyperstimulation and tachysystole in PGE2 group but in our study group no maternal hyperstimulation and tachysystole.

CONCLUSION : Isosorbide mononitrate is cheaper and effective to prostaglandin E2 for cervical ripening at term in normal pregnancies. IMN does not cause uterine hyperstimulation and maternal tachysystole. IMN does not cause non reassuring fetal heart rate pattern. IMN does not cause neonatal side effects. Induction delivery interval prolonged in IMN group (mean 20.36hrs) in study group mean delivery interval time was 16.32 hrs.