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Poster Number: **EP 259** Name: **Dr. Shivani (Associate specialist, TATA main hospital, Jamshedpur)**

Title: Efficacy of isosorbide mononitrate and Prostaglandin E2 gel in cervical ripening and induction of labour

- INTRODUCTION- artificial stimulation of uterine contraction before onset of labour in a viable pregnancy with the aim of achieving delivery by any method i.e medical, surgical or combined
- OBJECTIVES

1. To compare the effect of Isosorbide mononitrate and prostaglandin E2 gel on cervical ripening.
2. To **assess the neonatal outcome** in terms of birth weight, APGAR score at 5 mins, resuscitation required, NICU admission, mechanical ventilation required
3. To assess the **side effects of both the drugs**

- RESULTS

	IMN	PGE2
Mean induction to delivery time	Higher (30.71±5.35 hrs)	Lower (13.48±1.81 hrs)
Vaginal / LSCS	71.4% vaginal/ 28.6% LSCS	75.7% vaginal/ 24.3% LSCS
LSCS indication	Failed induction-90%, fetal distress-5%	Failed induction-35.29%, fetal distress-47.05%
Oxytocin augmentation	More (85.70%)	less
Uterine hyperstimulation	less	More (17.14%)
NICU admission	NIL	NIL

- MATERIAL AND METHOD

GROUP A | 70 subjects
40mg tablet of IMN in posterior fornix, repeated once after 12 hours maximum dose of 2 tablets

GROUP B | 70 subjects
three doses of 0.5mg PGE2 gel (Cerviprime) intracervically at 6-8 hours interval.

Maternal & fetal condition, progress of labour , bishops score-noted side effects -**nausea, flushing, headache, hypotension, foetal, and maternal tachycardia,** birth weight with APGAR at 5 mins noted in both groups

- REFERENCES

I. ACOG Practice Bulletin. Induction of labor. No. 10. 1999
II. Malathi TM, Kanchanamalai K. A comparative study of safety and efficacy of vaginal isosorbide mononitrate (40mg) with dinoprostone gel (0.5mg). Int J Reprod Contracept Obstet Gynecol. 2018; 7:4197-201.

No conflict of interest regarding this poster

Study design --------Prospective, randomized, comparative study
Study site ---------- Department of Obstetrics & Gynaecology of a Tertiary care hospital of Jamshedpur.
Study population----------Women fulfilling inclusion criteria
Study duration---------- 18 months
Sample size ----------total 140 women, 2 groups of 70 each

- CONCLUSION-

- Higher change in Bishop score, less oxytocin requirement, and shorter initiation of treatment to delivery interval and in PGE2 group support that PGE2 is more effective than IMN.
- **However, IMN can effectively** and **safely** be used as a **pre-induction agent for cervical ripening. IMN does not cause hyperstimulation unlike PGE2. IMN is cheaper, easily available,** can be used in outpatient basis.