

**CLINICAL TRIAL WITH 9 METHYLENE PGE₂
VAGINAL GEL (METENOPROST) VERSES.
LAMINARIA TENT FOR CERVICAL
DILATATION IN FIRST TRIMESTER ABORTION.**

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SUMMARY

Graduated metal dilators, Laminaria Tents, prostaglandin Vaginal pessaries and gel are known cervical dilators. In this study, MTP was done between 8 - 12 weeks gestation, four hours after the insertion of Laminaria Tent or application of PGE 2 GEL in posterior fornix. The Cervical dilatation, amount of bleeding and other complications were compared. With Laminaria Tent cervical dilatation was adequate upto 12 weeks of pregnancy, whereas with PGE2 Vaginal Gel, beyond 10 weeks gestation additional cervical dilatation with metal dilators was needed. Average bleeding was 75 ml with PG gel and 150 ml with Laminaria tent. Since the induction abortion time was only 4 hours, fever, abdominal pain, G I Symptoms and Cervico Uterine injury were minimal in both groups. PGE2 Vaginal Gel is better than Laminaria Tent as it gives adequate dilatation with minimum side effects and bleeding P/V.

INTRODUCTION :

Cervical dilatation with graduated metal dilators is the common procedure prior to first trimester abortion. Laminaria tent is a sea weed with hygroscopic effect. When inserted in the cervical canal, it dilates the cervix slowly. Prostaglandin analogues are known to cause Cervical ripening. Aim of this study is to compare the effectiveness of 9 methylene PGE₂ Vaginal Gel, versus Laminaria tent in subjects undergoing 1st

Trimester abortion on Cervical Dilatation in four hours, amount of bleeding and immediate complications.

MATERIAL AND METHODS :

30 Subjects wanting to undergo MTP between 8-12 weeks of pregnancy were selected. In 15 cases PGE 2 Vaginal Gel containing 3mg of 9 methylene PGE 2 was applied to posterior fornix. In 15 cases one medium sized laminaria tent was inserted upto internal OS. After four hours the tent was removed. Under proper sedation, the dilatation achieved in both groups and whether

further dilatation was necessary was noted. In all cases suction evacuation followed by check curettage was done and the amount of bleeding was noted. The patients were discharged the next day with antibiotics. They were followed up after 1 week and 8 weeks for any complications.

RESULTS :

Majority were Para I in 22 - 25 years age group, Next comprised of Para II subjects in the age group of 26-29 years. In our series 15% were unwed tennage mothers and 50% were Para I with LCB less than one year, out of 30 cases 10 were with 12 weeks pregnancy.

Cervical Dilatation : Average Cervical Dilatation with PGE2 GEL was 8mm. Beyond 10

TABLE I

Cervical Dilatation in four hours

| PGE 2 Vaginal GEL Dilatation | Laminaria Tent |
|---------------------------------|----------------|
| 1) Minimum - 7 mm : | 8.5 mm |
| 2) Average - 8 mm : | 11.5 mm |
| 3) Maximum - 9.5 mm : | 12.5 mm |

weeks, additional dilatation with metal dilators were needed. With Laminaria tent average dilatation was 11.5mm (Table I).

Amount of Bleeding

With PGE2 Vaginal Gel average bleeding was 75 ml and with Laminaria Tent 150 ml. The results are shown in Table II.

TABLE II

Amount of Bleeding

| PGE 2 Vaginal GEL | Laminaria Tent |
|-----------------------|----------------|
| 1) Minimum - 50 ml : | 100 ml |
| 2) Average - 75 ml : | 150 ml |
| 3) Maximum - 100 ml : | 200 ml |

Other Complications

Cervical injury, fever, pain in abdomen and G.I. Symptoms were minimal in both groups as the induction abortion interval is short and the dose of PGE2 GEL is less.

DISCUSSION :

Using 0.5mg of PGE 2 Vaginal Gel for induction of labour, Saxena (1987) found that, 70% of his cases had adequate Cervical dilatation. In Ist trimester abortion wit PGE2 Vaginal Gel, we found in our series 90% cases had adequate dilatation. 10% with pregnancy more than 10 weeks needed additional dilatation with metal dilators.

Goenka (1987) inserted Laminaria tent 18 hours prior to MTP in first trimester. The average dilatation was 11.5mm and the average amount of bleeding was 200-250 ml. 10% of these patients developed fever.

In another study by Pawade (1982) Laminaria tent was inserted 8 hours prior to MTP. Average dilatation achieved was 11.5mm and the amount of bleeding was 200-250 ml. 6% of his patients developed fever and pain in abdomen.

In our study, MTP was done four hours after insertion of Laminaria tent. The average dilatation achieved was 11.5mm and the average amount of bleeding was between 100-200 ml. None had fever or abdominal pain.

CONCLUSION :

Traditionally Laminaria Tent was introduced 16-18 hours prior to MTP. From this study, we find that there is not much of difference in the cervical dilatation obtained after 18 hours, 8 hours and 4 hours of insertion of Laminaria tent. But the amount of bleeding and morbidity increases when the abortion time is prolonged. With PGE 2 Vaginal Gel the cervical dilatation is adequate upto 10 weeks but beyond 10 weeks additional dilatation was needed. With PGE 2

Vaginal Gel the amount of bleeding was minimal (50 ml) and morbidity was less as the PGE2 dose is very small. With Laminaria tent average bleeding was 150 ml. Since the induction abortion interval is only 4 hours, other side effects were also minimal. Incidence of incomplete abortion was nil as check curettage was done in all cases. Prostaglandin Gel is better than Lami-

naria tent as it gives adequate dilatation with minimum bleeding PV and morbidity.

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TABLE I

| Cervical Dilatation in First hour | |
|-----------------------------------|----------------|
| PGE2 Vaginal Gel | Laminaria Tent |
| 1) Minimum - 7 mm | 8.5 mm |
| 2) Average - 8 mm | 11.5 mm |
| 3) Maximum - 9.5 mm | 12.5 mm |

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TABLE II

| Amount of Bleeding | |
|---------------------|----------------|
| PGE2 Vaginal Gel | Laminaria Tent |
| 1) Minimum - 20 ml | 100 ml |
| 2) Average - 32 ml | 150 ml |
| 3) Maximum - 100 ml | 200 ml |

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