PROSTAGLANDIN E2

Class: Abortifacient; Prostaglandin

Indications:

1. **Endocervical gel**: Promote cervical ripening in patients at or near term in whom there is a medical or obstetrical indication for the induction of labor

2. **Suppositories**: Terminate pregnancy from 12th through 20th week of gestation; evacuate uterus in cases of missed abortion or intrauterine fetal death up to 28 weeks of gestation; manage benign hydatidiform mole (nonmetastatic gestational trophoblastic disease)

3. **Tablet (oral)**: Elective induction of labor; when indications for induction of labor exist (eg, premature rupture of amniotic membranes, toxemia of pregnancy, Rh incompatibility, diabetes mellitus, hypertension, postmaturity, intrauterine death or fetal growth retardation)

4. **Vaginal gel**: Induction of labor in patients at or near term with singleton pregnancy, vertex presentation, and favorable induction features

5. **Vaginal insert**: Initiation and/or continuation of cervical ripening in patients at or near term in whom there is a medical or obstetrical indication for the induction of labor

Available dosage form in the hospital:

PROSTAGLANDIN E2 3MG V. TAB

Dosage:

- **Abortifacient**: *Vaginal suppository*: Insert 20 mg (1 suppository) high in vagina, repeat at 3- to 5-hour intervals until abortion occurs; continued administration for longer than 2 days is not advisable

- **Cervical ripening**:

  1. **Endocervical gel**: Using catheter supplied with gel, insert 0.5 mg into the cervical canal. May repeat every 6 hours if needed. Maximum cumulative dose: 1.5 mg/24 hours

  2. **Tablet (oral)**:

     - Induction: Initial: 0.5 mg and then repeat 0.5 mg dose 1 hour later; may give additional 0.5 mg dose on an hourly basis as needed for satisfactory uterine response. Maintain patient at the lowest effective dose. **Note**: Failure to induce regular contractions after 8 hours indicates failed induction and alternative management of patient should be considered. If patient vomits an intact tablet during therapy repeat dose. If patient vomits intact tablets following 2 successive doses, withhold therapy until next scheduled dose. If patient vomits a partial tablet or if no tablet is visible, continue at next regularly scheduled dose.

     - Parity ≥2 times or Bishop Score of ≥6: Administer 0.5 mg hourly throughout induction (discontinue hourly dose for excessive uterine activity)

     - Nulliparous or multiparous and resistant to induction (Bishop Score <6): If inadequate response after 2 hours of therapy may increase dose in 0.5 mg increments at hourly intervals up to a maximum single dose of 1.5 mg.
- Maintenance of labor: 0.5 mg dose hourly; may occasionally withhold hourly dose to assess need for further dosing

3. **Vaginal gel (Canadian labeling):** Initial: Using prefilled syringe, insert 1 mg into the posterior fornix of the vaginal canal; may give 1 additional dose of 1-2 mg 6 hours later if needed.

4. **Vaginal insert:** Insert 10 mg transversely into the posterior fornix of the vagina (to be removed at the onset of active labor or after 12 hours)

**Common side effect:**

* **Endocervical gel:**
  1. Central nervous system: Fever
  2. Gastrointestinal: GI upset
  3. Genitourinary: Abnormal uterine contractions, warm feeling in vagina
  4. Neuromuscular & skeletal: Back pain

* **suppository:**
  1. Cardiovascular: Arrhythmia, chest pain, chest tightness, hypotension, syncope
  2. Central nervous system: Chills, dizziness, fever, headache, shivering, tension
  3. Dermatologic: Rash, skin discoloration
  4. Endocrine & metabolic: Breast tenderness, endometritis, hot flashes
  5. Gastrointestinal: Dehydration, diarrhea, nausea, vomiting
  6. Genitourinary: Uterine rupture, urinary retention, vaginal pain, vaginismus, vaginitis, vulvitis
  7. Neuromuscular & skeletal: Arthralgia, backache, joint inflammation/pain (new or exacerbated), leg cramps (nocturnal), muscle cramp/pain, myalgia, paresthesia, stiff neck, tremor, weakness
  8. Ocular: Blurred vision, eye pain
  9. Otic: Hearing impairment
  10. Respiratory: Cough, dyspnea, laryngitis, pharyngitis, wheezing
  11. Miscellaneous: Diaphoresis

* **Tablets (oral):**
  Gastrointestinal: Vomiting (with or without nausea/diarrhea): (dose dependent)

* **Vaginal gel:**
  Genitourinary: Uterine hypercontractility, failed induction

**Pregnancy Risk Factor:** C