**estropipate** (es-troe-pi-pate)

**Synonyms:**

- estroproprionate
- estropromination
- estropromination
- proptimization

**Classification:**

- Teratogenic: Progestagens
- Pregnancy Category: X

**Therapeutic:**

- Hormones

**Pharmacologic:**

- Estrogens

**Pregnancy Category X.**

**Indications:**

- **PO:**
  - As part of HRT in the treatment of vasomotor symptoms of menopause.
  - Treatment of various estrogen deficiency states, including: Female hypogonadism, Ovariectomy, Primary ovarian failure.
  - Adjunctive therapy of postmenopausal osteoporosis.
  - Concurrent use of progestin is recommended during cyclical therapy to decrease the risk of endometrial carcinoma in patients with an intact uterus.

**Action:**

- Estrogens promote the growth and development of female sex organs and the maintenance of secondary sex characteristics in women. Metabolic effects include reduced blood cholesterol, protein synthesis, and sodium and water retention.

**Therapeutic Effects:**

- Restoration of hormonal balance in various deficiency states.

**Pharmacokinetics:**

- **Absorption:** Well absorbed after oral administration.
- **Distribution:** Widely distributed. Crosses the placenta and enters breast milk.
- **Metabolism and Excretion:** Mostly metabolized by the liver and other tissues. Enterohepatic recirculation occurs, and more absorption may occur from the GI tract.
- **Half-life:** Unknown.

**TIME/ACTION PROFILE (estrogenic effects)**

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<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
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**Contraindications/Precautions:**

- **Contraindicated in:**
  - Thromboembolic disease.
  - Undiagnosed vaginal bleeding.
  - OB: Known to cause fetal harm.
  - Lactation: May cause a decrease in milk production.

**Adverse Reactions/Side Effects:**

- **CNS:** Headache, dizziness, lethargy, mental depression.
- **EENT:** In tolerate contact lenses, worsening of myopia or astigmatism.
- **CV:** MI, thrombosis, hemorrhage, edema, hypertension.
- **GI:** Nausea, weight changes, anorexia, abdominal pain, vomiting.
- **GU:** Amenorrhea, breakthrough bleeding, dysmenorrhea, cervical erosion, loss of libido, erectile dysfunction, breast tenderness, vaginal candidiasis, testicular atrophy, loss of libido, premature ovarian failure.
- **Derm:** Acne, oily skin, urticaria.
- **Endo:** Gynecomastia, hyperglycemia.
- **F and E:** Hypercalcemia, sodium and water retention.
- **MS:** Leg cramps.

**Interactions:**

- **Drug-Drug:**
  - May alter requirement for warfarin, oral hypoglycemic agents, or insulin.
  - May increase effectiveness.
  - Smoking increases risk of adverse cardiovascular reactions.

**Route/Dosage:**

- **Vasomotor Symptoms of Menopause/Atrophic Vaginitis/Osteoporosis**
  - **PO (Adults):** 0.75–6 mg daily or in a cycle.

- **Female Hypogonadism/Ovarian Failure**
  - **PO (Adults):** 1.5–9 mg daily or in a cycle.

**NURSING IMPLICATIONS:**

**Assessment:**

- Monitor intake and output ratios and weekly weight. Report significant discrepancies or steady weight gain.

**Contraindication/Precaution:**

- **Contraindicated in:**
  - Obstructive sleep apnea, heart failure, severe hepatic or renal disease.
  - May ↑ risk of endometrial carcinoma.

**Use Cautiously in:**

- Underlying cardiovascular disease.
- Severe hepatic or renal disease.
- May ↑ risk of endometrial carcinoma.
● Monitor hepatic function before and periodically throughout therapy.

● May cause false interpretations of thyroid function tests, false increases in norepinephrine platelet-induced aggregability, and false decreases in metyrapone tests.

Potential Nursing Diagnoses

Sexual dysfunction (Indications)

Implementation

● PO: Administer PO doses with or immediately after meals to reduce nausea.

● Vag: Manufacturer provides applicator with cream. Dose is marked on the applicator. Wash applicator with mild soap and warm water after each use.

Patient/Family Teaching

● Instruct patient to take oral medication as directed. If a dose is missed, take as soon as remembered as long as it is not just before next dose. Do not double doses.

● Explain medication schedule to women on 21-day cycle followed by 7 days of not taking medication. Encourage patient to take medication at the same time each day.

● If nausea becomes a problem, advise patient that eating solid food often provides relief.

● Advise patients to report signs and symptoms of fluid retention (swelling of ankles and feet, weight gain), thromboembolic disorders (pain, swelling, or tenderness in extremities; headache; chest pain; blurred vision), mental depression, hepatic dysfunction (reddened skin or eyes, premature darkening, light-colored stools), or abnormal vaginal bleeding to health care professional.

● Instruct patient to stop taking medication and notify health care professional if pregnancy is suspected.

● Caution patient that cigarette smoking during estrogen therapy may increase risk of serious side effects, especially for women over age 35.

● Caution patients to use sunscreen and protective clothing to prevent increased pigmentation.

● Advise patient to notify health care professional of medication regimen before treatment or surgery.

● Advise patient treated for osteoporosis that exercise has been found to arrest and reverse bone loss. The patient should discuss any exercise limitations with health care professional before beginning program.

Evaluation/Desired Outcomes

- Resolution of menopausal vasomotor symptoms.
- Decreased vaginal and vulvar itching, inflammation, or dryness associated with menopause.
- Normalization of estrogen levels in patients with ovariectomy or hypogonadism.
- Prevention of osteoporosis.

Why was this drug prescribed for your patient?