Danazol (da-na-zole)

Treatment of moderate endometriosis that is unresponsive to conventional therapy.

Pharmacology: Hormones

Pregnancy Category X

Classification

Therapeutic: Hormones

Androgens

Indications

Treatment of moderate endometriosis that is unresponsive to conventional therapy.

Palliative therapy of fibrocystic breast disease. Prophylaxis of hereditary angioedema.

Action

Inhibits pituitary output of gonadotropins, resulting in suppression of ovarian function. Has weak androgenic-anabolic activity.

Therapeutic Effects:

Atrophy of ectopic endometrial tissue in endometriosis. Decreased pain and nodularity in fibrocystic breast disease. Correction of biochemical abnormalities in hereditary angioedema.

Pharmacokinetics

Absorption: Absorbed from the GI tract.

Distribution: Unknown.

Metabolism and Excretion: Metabolized by the liver.

Half-life: 4.5 hr.

TIME/ACTION PROFILE (disease response)

ROUTE ONSET PEAK DURATION

PO (endometriosis) unknown 6–8 wk 60–90 days

PO (fibrocystic disease) 1 mo 2–6 mo 1 yr

PO (angioedema) unknown 1–3 mo unknown

Contraindications/Precautions

Contraindicated in: Hypersensitivity; Male patients with breast or prostate cancer; Hypercalcemia; Severe hepatic, renal, or cardiac disease; OB, Lactation: Pregnancy or lactation.

Use Cautiously in: Previous history of liver disease; History of porphyria; Coronary artery disease; Prepubertal boys.

Adverse Reactions/Side Effects


Interactions

Drug-Drug: May potentiate warfarin, oral hypoglycemic agents, and antihypertensives. May increase serum levels and risk of toxicity of cyclosporine and carbamazepine. May increase the requirement for insulin in patients with diabetes. May increase the risk of myopathy or rhabdomyolysis with HMG Co-A reductase inhibitors.

Route/Dosage

PO (Adults and Adolescents): Endometriosis—400 mg twice daily (for milder cases may initiate therapy with 100–200 mg twice daily). Fibrocystic breast disease—50–200 mg twice daily. Hereditary angioedema—200 mg 2–3 times daily. Attempts to decrease by 50% or less q 1–3 mo. If acute attack occurs, dose may be up to 200 mg/day.

NURSING IMPLICATIONS

Assessment

Endometriosis: Assess endometrial pain before and periodically throughout therapy.

Fibrocystic Breast Disease: Assess breast pain, tenderness, and nodules before and monthly throughout therapy. To rule out carcinoma, mammography or core biopsy is recommended before and during treatment of nodular or persistent tenderness.

Hereditary Angioedema: Monitor for edematous attacks throughout therapy, especially when dosage adjustments are made.

Labs: Monitor liver function tests periodically throughout therapy.

Semen volume and viscosity, sperm count, and motility determinations are recommended every 3–4 mo during treatment for hereditary angioedema, especially in adolescents.

May alter results of glucose tolerance or insulin function tests. May also cause transient glucose and low density lipoprotein concentrations and increase high-density lipoprotein concentrations.

Pregnancy Category X
Potential Nursing Diagnoses
Sexual dysfunction (Side Effects)
Disturbed body image (Side Effects)
Deficient knowledge, related to medication regimen (Patient/Family Teaching)

Implementation
- In patients with endometriosis or fibrocystic breast disease, therapy should be started during menstruation or preceded by a pregnancy test. Advise patient to notify health care professional immediately if pregnancy is suspected.
- PO: Medication may be administered with meals to minimize GI irritation.

Patient/Family Teaching
- Instruct patient to take medication exactly as directed. Take missed doses as soon as remembered, if not almost time for next dose, do not double doses.
- Advise patient to notify health care professional if masculinizing effects occur (abnormal growth of facial hair or other body hair, deepening of the voice).
- Advise patient to use sunscreen and protective clothing to prevent photosensitivity reactions.
- Advise patient to use a nonhormonal form of contraception during therapy. Instruct patient that amenorrhea is expected with higher doses. Instruct patient to notify health care professional if regular menstruation does not occur within 40–90 days after discontinuation of therapy or if pregnancy is suspected.
- Emphasize the importance of routine visits to health care professional to check progress during therapy.
- Fibrocystic Breast Disease: Teach patient the correct technique for monthly breast self-exam. Instruct patient to report increase in size of nodules to health care professional promptly.

Evaluation/Desired Outcomes
- Decrease in symptoms of endometriosis. Therapy for endometriosis usually requires 3–6 mo and may extend to 9 mo to decrease symptoms.
- Relief of pain and tenderness in fibrocystic breast disease, which is usually relieved by the first month and eliminated in 2–3 mo. Elimination of nodularity usually requires 4–6 mo.
- Resolution of signs and symptoms of hereditary angioedema. Initial response in hereditary angioedema may require 1–3 mo of therapy; efforts should be made to decrease dose at 1–3-mo intervals.

Why was this drug prescribed for your patient?