Ketoconazole (topical) (kee-toe-koe-a-zole)

Classification

Therapeutic: antifungals
Pharmacologic: imidazoles

Pregnancy Category C

Indications

Treatment of a variety of cutaneous fungal infections, including cutaneous candidiasis, tinea pedis (athlete’s foot), tinea cruris (jock itch), tinea corporis (ringworm), dandruff (as a shampoo), seborrheic dermatitis, and tinea versicolor.

Action

Affects the synthesis of the fungal cell wall. Therapeutic Effects: Decreased symptoms of fungal infection.

Pharmacokinetics

Absorption: Minimal absorption through intact skin.
Distribution: If absorption occurs, widely distributed; crosses the placenta; enters breast milk. Action after topical administration is primarily local.
Metabolism and Excretion: If absorbed, partially metabolized by the liver then excreted in feces via biliary excretion.
Half-life: If absorbed, 8 hr.

Time/ACTION Profile (resolution of symptoms/lesions)

ROUTE ONSET PEAK DURATION
Topical unknown unknown unknown

Contraindications/Precautions

Contraindicated in: Hypersensitivity to active ingredient, additives, preservatives, or bases. Some products contain sulfites and should be avoided in patients with known intolerance.

Use Cautiously in: Nail and scalp infections (may require additional systemic therapy).

Adverse Reactions/Side Effects

Local: burning, itching, local hypersensitivity reactions, redness, stinging.

Interactions

Drug-Drug: None significant since absorption is minimal with topical therapy.

Route/Dosage

Topical (Adults and Children ≥12 yr): Apply cream once daily for cutaneous candidiasis, tinea corporis, tinea cruris, tinea pedis, and tinea versicolor. Apply cream twice daily for seborrheic dermatitis. Patients with cutaneous candidiasis, tinea cruris, tinea corporis, and tinea versicolor should be instructed for 2 wk. Patients with tinea pedis should be treated for 6 wk. Patients with seborrheic dermatitis should be treated for 4 wk (2 wk with gel). For dandruff, use shampoo twice weekly (week 1–4 days between treatments) for 4 wk, then intermittently.

NURSING IMPLICATIONS

Assessment

• Inspect involved areas of skin and mucous membranes before and frequently during therapy. Increased skin irritation may indicate need to discontinue medication.

Potential Nursing Diagnoses

Risk for impaired skin integrity (Indications)
Risk for infection (Indications)
Deficient knowledge, related to medication regimen (Patient/Family Teaching)

Implementation

• Consult health care professional for proper cleansing technique before applying medication.

Topical:

Apply small amount to cover affected area completely. Avoid the use of occlusive wrappings or dressings unless directed by health care professional.

Ketoconazole shampoo: Moisten hair and scalp thoroughly with water. Apply sufficient shampoo to produce enough lather to wash scalp and hair and gently massage it over the entire scalp area for approximately 1 min. Rinse hair thoroughly with warm water. Repeat process, leaving shampoo on hair for an additional 3 min. Rinse the second shampoo, rinse and dry hair with warm or warm-air blow dryer. Shampoo twice a week for 4 wk with at least 3 days between each shampooing and then intermittently as needed to maintain control.

Adverse Reactions/Side Effects

Local: burning, itching, local hypersensitivity reactions, redness, stinging. DERM: 7 hair loss (shampoo).

Interactions

Drug-Drug: None significant since absorption is minimal with topical therapy.
Foam: Hold container upright and dispense foam into cap of can or other smooth surface; dispensing directly on to hands is not recommended as the foam begins to melt immediately on contact with warm skin. Pick up small amounts with fingertips and gently massage into affected areas until absorbed. Move hair to allow direct application to skin.

Patient/Family Teaching
- Instruct patient to apply medication as directed for full course of therapy, even if feeling better. Emphasize the importance of avoiding the eyes.
- Patients with athlete’s foot should be taught to wear well-fitting, ventilated shoes and to change shoes and socks at least once a day.
- Advise patient to report increased skin irritation or lack of response to therapy to health care professional.

Evaluation/Desired Outcomes
- Decrease in skin irritation and resolution of infection. Early relief of symptoms may be seen in 2–3 days. For 
  *Candida*, tinea cruris, and tinea corporis, 2 wk are needed, and for tinea pedis, therapeutic response may take 4–6 wk. Use for subcutaneous use 6 wk (2 ml enroll 30). Recurrent fungal infections may be a sign of systemic illness.

Why was this drug prescribed for your patient?