ursodiol (ur-soe-dye-ole)

Actigall, Urso 250, Urso D, Urso Forte

Classification
Therapeutic: gallstone-dissolution agents

Pregnancy Category B

Indications

Action
Cholesterol reduction, a cause of gallstones, by suppressing cholesterol synthesis and secretion from the liver and inhibiting intestinal absorption of cholesterol. Therapeutic Effects: Gallstone dissolution and reduction in gallstone formation. Decreases progression of liver disease and improvement in liver function tests.

Pharmacokinetics
Absorption: 90%.
Distribution: Only small quantities are found in the systemic circulation; sites of action include the liver, bile, and gut lumen.
Protein Binding: 70%.
Metabolism and Excretion: Undergoes extensive enterohepatic recycling; excreted in feces via bile.
Half-life: 100 hr.

TIME/ACTION PROFILE
ROUTE ONSET PEAK DURATION
PO unknown unknown unknown

Contraindications/Precautions
Contraindicated in: Patients requiring cholecystectomy; Calcified cholesterol stones, radiopaque stones, bile pigment stones, or stones >20 mm; Complete biliary obstruction.
Use Cautiously in: Chronic liver disease.

Adverse Reactions/Side Effects

Interactions
Drug-Drug: Cholestyramine, colestipol, and aluminum-containing antacids may impair absorption. Estrogens may impair effectiveness.

Route/Dosage
PO (Adults): Gallstone dissolution—Initial 8–10 mg/kg/day in 2–3 divided doses; maintenance: 250 mg/day at bedtime for 6 mo–1 yr. Gallstone prevention—100 mg twice daily; Primary biliary cirrhosis—15–20 mg/kg/day in 2–4 divided doses.
PO (Children and Infants): TPN-induced cholestasis—30 mg/kg/day in 2–3 divided doses.
PO (Infants): Biliary atresia—10–15 mg/kg/day.

NURSING IMPLICATIONS
Assessment
Monitor abdominal pain prior to and periodically during therapy.
Monitor ultrasonograms at 6 mo intervals during the first year of therapy.
Lab Test Considerations: Monitor liver function tests (GGT, alkaline phosphatase, AST, ALT) and bilirubin levels every mo for three mo and every six mo thereafter. If increase to clinically significant levels, consider discontinuation of therapy.

Potential Nursing Diagnoses
Acute pain (Indications)

Implementation
Administer with food. Tablets may be broken in half and swallowed with water. To minimize the bitter taste, advise patient to swallow the half-tablet quickly without chewing. Half-tablets should be stored separately for up to 28 days.

Patient/Family Teaching
- Instruct patient to take medication as directed.
- Advise patient to avoid aluminum-containing antacids during therapy; may impair absorption.
- Administer with food. Tablets may be broken in half and swallowed with water. To minimize the bitter taste, advise patient to swallow the half-tablet quickly without chewing. Half-tablets should be stored separately for up to 28 days.
- Inform patient that therapy may be discontinued.
- Instruct patient to notify health care professional of all Rx or OTC medications, vitamins, or herbal products being taken.
- May cause bowel motion to change to clay color (stools). This is normal and will not affect absorption.

Monitor patient for signs and symptoms of cholestasis (jaundice, dark urine, light-colored stools).

Genetic Implication. CAPI TALS indicate life-threatening, underlines indicate most frequent. Strikethrough Discontinued.
Evaluation/Desired Outcomes

- Dissolution and reduction in formation of gallstones. May take several mo of therapy and complete dissolution may not occur. Stone recurrence may occur after dissolution.
- Progression of liver disease and improvement in liver function tests.

Why was this drug prescribed for your patient?