Fluvastatin (floo-va-stat-in)
Lescol, Lescol XL

Classification
Therapeutic: Lipid-lowering agents
Pharmacologic: HMG-CoA reductase inhibitors

Pregnancy Category X

Indications
Adjuvant management of primary hypercholesterolemia and mixed dyslipidemia. No routine pretreatment of coronary artery disease patients with clinically evident coronary heart disease. Shows the progression of coronary artery disease in patients with coronary artery disease.

Action
Inhibits 3-hydroxy-3-methylglutaryl-coenzyme A (HMG-CoA) reductase, an enzyme which is responsible for catalyzing an early step in the synthesis of cholesterol. Therapeutic Effects: Lowering of total and LDL cholesterol and triglycerides. Slightly increases HDL cholesterol. Slows the progression of coronary artery disease with resultant decrease in incidence of coronary heart disease-related events.

Pharmacokinetics
Absorption: 98% absorbed after oral administration but undergoes extensive first-pass hepatic metabolism resulting in 24% bioavailability.
Distribution: Enters breast milk; remainder of distribution unknown.
Protein Binding: 98%.
Metabolism and Excretion: After extensive hepatic metabolism, 5% is excreted in urine, 90% in feces.
Half-life: 1.2 hr.

TIME/ACTION PROFILE (cholesterol-lowering effect)

ROUTE ONSET PEAK DURATION
PO 1–2 wk 4–6 wk unknown

Contraindications/Precautions
Contraindicated in: Hypersensitivity; OB, Lactation: Pregnancy and lactation; Active liver disease or unexplained persistent elevations in AST and ALT.

Use Cautiously in: History of liver disease; Alcoholism; Renal impairment; Safety not established.

Adverse Reactions/Side Effects
CNS: amnesia, confusion, dizziness, fatigue, headache, insomnia, memory loss.
Resp: bronchitis, cough, pharyngitis, sinusitis.
CV: chest pain, peripheral edema.
Gastrointestinal: Abdominal pain/cramps, constipation.
Endocrine: Hyperglycemia.
Musculoskeletal: Arthritis, immune-mediated pseudolupus syndrome, myopathy, nephrotic syndrome.
Skin: Rash, pruritus.
Other: Allergic reactions including anaphylaxis.

Interactions
Drug-Drug: Fluvastatin is metabolized by the CYP 2C9 metabolic pathway. Concurrent use with gemfibrozil, erythromycin, colchicine, cyclosporine, azole antifungal agents, or large doses of niacin (concurrent use with gemfibrozil should be avoided; use doses with cyclosporine, and fluconazole). Concurrent ingestion with cholesterylamine or colestipol may cause impairment of fluvastatin absorption. May cause slight increase in serum digoxin levels. Concurrent use with rifampin may increase serum digoxin levels. May slightly increase serum digoxin levels. May modify effects of warfarin.

Route/Dosage
PO (Adults): 20–40 mg (immediate-release) once daily at bedtime. May be increased to 40 mg twice daily (immediate-release). Can be coadministered with cyclosporine—Dose should not exceed 20 mg twice daily.

NURSING IMPLICATIONS
Assessment
• Obtain a diet history, especially in regard to fat consumption. • Lab Test Considerations: Serum cholesterol and triglyceride levels should be evaluated before, at 4 wk after initiating therapy, and periodically during therapy.

NURSING CONSIDERATIONS
• Monitor liver function tests, including AST and ALT, before initiating therapy and if signs of liver injury (fatigue, anorexia, right upper abdominal discomfort, dark urine or jaundice) occur. May also cause alkaline phosphatase and bilirubin elevations. • May discontinue fluvastatin if no therapeutic effects and side effects are observed. • May discontinue fluvastatin if no therapeutic effects and side effects are observed.
Lab Test Considerations: If patient develops muscle tenderness during therapy, monitor CPK levels. If CPK levels are markedly ↑ or myopathy occurs, discontinue fluvastatin. Monitor for signs and symptoms of immune-mediated necrotizing myopathy (IMNM) (proximal muscle weakness and ↑ serum creatine kinase), persisting despite discontinuation of statin therapy. Perform muscle biopsy to diagnose; shows necrotizing myopathy without significant inflammation. Treat with immunosuppressive agents.

Potential Nursing Diagnoses
- Deficient knowledge, related to medication regimen
- Noncompliance

Implementation
- PO: Administer once daily at bedtime. May be administered without regard to food.
- Do not crush, break, or chew extended-release tablets or open capsules. Do not take two 40-mg tablets at once.
- If administered in conjunction with bile acid sequestrants (cholestyramine, colipan), administer fluvastatin at least 4 hr after bile acid sequestrant.
- Avoid grapefruit and grapefruit juice during therapy; may increase risk of toxicity.

Patient/Family Teaching
- Instruct patient to take medication as directed. Take missed doses as soon as remembered; do not double doses. Advise patient to read Patient Information sheet prior to therapy and with each Rx refill. Fluvastatin helps control but does not cure elevated serum cholesterol levels.
- Advise patient to use sunscreen and wear protective clothing to prevent photosensitivity reactions.
- Advise patient to notify health care professional of medication regimen before surgery.
- Instruct female patients to notify health care professional immediately if pregnancy is planned or suspected, or if breast feeding. Patients should be advised to use a reliable form of contraception and avoid breast feeding.

Evaluation/Desired Outcomes
- Decrease in LDL and total cholesterol levels.
- Decrease in HDL cholesterol levels.
- Decrease in serum triglyceride levels.

Why was this drug prescribed for your patient?