gemfibrozil (gem-fye-broez-il)

Classification
Therapeutic: lipid-lowering agents
Pharmacologic: fibric acid derivatives

Pregnancy Category C

Indications
Management of type II-b hyperlipidemia (decreased HDL, increased LDL, increased triglycerides) in patients who do not yet have clinical coronary artery disease and have failed therapy with diet, exercise, weight loss, or other agents (niacin, bile acid sequestrants).

Action
Inhibits peripheral lipolysis. Decreases triglycerides produced by the liver. Decreases production of the triglyceride carrier protein. Increases HDL. Therapeutic Effects: Decreased plasma triglycerides and increased HDL.

Pharmacokinetics
Absorption: Well absorbed after oral administration.
Distribution: Unknown.
Metabolism and Excretion: Some metabolism by the liver; 70% excreted by the kidneys (mostly unchanged), 6% excreted in feces.
Half-life: 1.3–1.5 hr.

TIME/ACTION PROFILE (triglyceride-VLDL–lowering effect)

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
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</thead>
<tbody>
<tr>
<td>PO</td>
<td>2–5 days</td>
<td>4 wk</td>
<td>several mo</td>
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Contraindications/Precautions
Contraindicated in: Hypersensitivity; Primary biliary cirrhosis; Concurrent use of HMG-CoA reductase inhibitors or repaglinide.
Use Cautiously in: Gallbladder disease; Liver disease; Severe renal impairment; OB, Lactation, Pedi: Safety not established.

Adverse Reactions/Side Effects

Interactions
Drug-Drug: Repaglinide may ↑ the risk of severe hypoglycemia; concurrent use contraindicated. May ↓ the effects of warfarin or sulfonylurea oral hypoglycemic agents. Concurrent use with HMG-CoA reductase inhibitors may ↑ the risk of rhabdomyolysis (avoid concurrent use). May ↓ the effect of cyclosporine. Cholestyramine and colestipol may ↓ absorption; separate administration by 2 hr.

Route/Dosage
PO (Adults): 600 mg twice daily. May be increased to 1200 mg daily. Switch from morning and evening dosing to once daily.

NURSING IMPLICATIONS
Assessment
● Obtain patient’s drug history, especially regarding fat and alcohol consumption.

Lab Test Considerations: Monitor serum triglyceride and cholesterol levels before and periodically during therapy. Assess LDL and NIH levels before and periodically during therapy. Discontinue gemfibrozil if paradoxical ↑ in lipid levels occurs.

● Assess liver function tests before and periodically during therapy. May cause ↑ serum bilirubin, alkaline phosphatase, CK, LDH, AST, and ALT. If hepatic function tests rise significantly, therapy should be discontinued and not resumed.

● Evaluate CBC and electrolytes every 3–6 mo and then yearly during therapy. May cause ↑ serum potassium concentrations.

● May cause slight ↑ in serum glucose.

Potential Nursing Diagnoses
Noncompliance (Patient/Family Teaching)

Implementation
● PO: Administer 30 min before breakfast or dinner.

Patient/Family Teaching
● Instruct patient to take medication as directed, not to skip doses or double up on missed doses. Take missed doses as soon as remembered unless almost time for next dose.

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● Instruct patient to take medication as directed, not to skip doses or double up on missed doses. Take missed doses as soon as remembered unless almost time for next dose.
Advise patient that this medication should be used in conjunction with dietary restrictions (fat, cholesterol, carbohydrates, alcohol), exercise, and cessation of smoking.

Instruct patient to notify health care professional promptly if any of the following symptoms occur: severe stomach pains with nausea and vomiting, fever, chills, sore throat, rash, diarrhea, muscle cramping, general abdominal discomfort, or persistent flatulence.

Evaluation/Desired Outcomes

- Decrease in serum triglyceride and cholesterol levels and improved HDL to total cholesterol ratios. If response is not seen within 3 mo, medication is usually discontinued.

Why was this drug prescribed for your patient?