

Lipid Lowering Agents

Class of Drug	Actions	Uses	Side Effects	Nursing Implications
<p>Bile-acid sequestrants</p> <p>Questran, Colestid, Welchol</p>	<ul style="list-style-type: none"> - Resins bind bile acids in the gut; liver then converts more cholesterol to bile - Decr. LDL (15-30% reduction) - Results seen in 2 weeks 	<ul style="list-style-type: none"> - For younger populations and for moderately elevated cholesterol levels - Used w/ statin for severe hypercholesterolemia 	<ul style="list-style-type: none"> - GI-constipation, bloating, nausea, flatulence - Osteoporosis (long term) - May increase TG levels so not recommended for patients w/ TG's > 200 mg/dl 	<ul style="list-style-type: none"> - Decr. absorption of vit A, D, E, K; thiazides, beta blockers, Digoxin, Coumadin - Need high fluid consumption - Mix powder in liquid or food - Take other drugs 1h before meals or 4h after meals - Monitor PT, Digoxin levels - Check cholesterol levels (6-8 wks) - Report any unusual S/Sx - Monitor GI distress, esp. bowel elimination
<p>Fibric acid derivatives</p> <p>Lopid (take 30 min ac am & pm meal) Tricor (take w/ food)</p>	<ul style="list-style-type: none"> - Incr. lipoprotein lipase (N-zye) activity so incr. catabolism of VLDL & LDL - Inhibits synthesis of cholesterol - Decr. TG's up to 50% & decr. HDL up to 15% 	<ul style="list-style-type: none"> - To treat elevated LDL levels; not absorbed systemically - Severe hyperlipidemia in persons w/ risk of CHD or pancreatitis (prevention) - In combo w/ niacin or statin for prevention of heart dx, elevated LDL, high TG & low HDL - Used to tx familial hyperlipidemia 	<ul style="list-style-type: none"> - Cholelithiasis - GI disturbances (N/V) - Bleeding tendencies - Skin rash w/ Lopid - Myositis if used with statin - Myalgias alone or w/ statins or niacin, soreness, weakness - Hepatotoxicity 	<ul style="list-style-type: none"> - Short term use only - Monitor PT/INR if on coumadin (incr. effect) - Incr. toxicity of phenytoin - Assess for hx of gallbladder & liver dx - Check LFT's q 6-8 wks initially
<p>HMG-CoA reductase inhibitors</p> <p>"Statins"</p> <p>Mevacor, Zocor, Pravachol, Lipitor, Lescol</p>	<ul style="list-style-type: none"> - Inhibit synthesis of cholesterol by the liver, so in number of cell LDL receptors; LDL is removed from plasma - Decr. LDL by 40% - Incr. HDL by 15% - Decr. TG's 10-40% - Decr. cholesterol by 33% 	<ul style="list-style-type: none"> - Hypercholesterolemia caused by elevated LDL - Prevention of 1st or 2nd MI in pts w/ CAD, DM or hyperlipidemia - Used more in older patients 	<ul style="list-style-type: none"> - GI problems: dyspepsia, flatulence, constipation, abdomen pain & cramps - Rhabdomyolysis if used with f.a. derivative or niacin (CPK levels) - Hepatotoxicity - Alteration of PT time (Zocor) 	<ul style="list-style-type: none"> - Decr. absorption of ADEK vitamins - Incr. bleeding time if on Coumadin - Do not use in pregnancy - Do not use under age 18 - Check LFT's q 6-8 wks for 1st yr - Report muscle aches; abdominal pain (RUQ)
<p>Niacin</p> <p>Niaspan (sustained release)</p>	<ul style="list-style-type: none"> - Decr. synthesis of VLDL by liver - Therapeutic dose is 100-200x the daily requirement 	<ul style="list-style-type: none"> - Indicated for mixed hyperlipidemia 	<ul style="list-style-type: none"> - Flushing, itching - Can aggravate peptic ulcer, diabetes (hyperglycemia), gout - Abnormal liver function 	<ul style="list-style-type: none"> - Take w/ aspirin 30 min ac - Start doses slow then incr. - Do not chew tablets - Monitor blood glucose - Take w/ meals

