

Xanthomas

Zen-master

Eruptive skin xanthomas are small, erythematous-yellow nodular papules mostly seen on the buttocks, trunk, and extensor surfaces. This clinical feature is associated with chylomicronemia and occurs due to lipid deposition in the skin.

Acute Pancreatitis

Acute-angle Pancreas-on-fire

Triglyceride levels are often above 1000 mg/dL, increasing the risk of acute pancreatitis. Patients with triglyceride levels above 500 mg/dL should be treated to prevent acute pancreatitis.

Diagnosis

Lipid Panel

Lip Panel

A lipid panel is helpful in diagnosis as it will return values for all the lipoproteins as well as cholesterol and triglycerides. Another test is post-heparin lipolytic activity. Type V dyslipidemia is characterized by elevated post-heparin lipolytic activity qualitatively. In contrast, type I presents with absent or decreased post-heparin lipolytic activity. Lipoprotein lipase is bound with heparan sulfate moieties on the vascular endothelium. By administering heparin, lipoprotein lipase will be free from its binding to heparan sulfate. This allows LPL activity measurement.

Management

Lifestyle Changes

Throwing away Unhealthy food, Cigarette, and Exercising on stairs

Lifestyle modification should be the initial step in treating the patient. This includes smoking cessation, reduced alcohol consumption, other dietary changes, exercise, and weight reduction.

Statins

Statue

Statins are also helpful in reducing cholesterol in hyperlipoproteinemia patients. They work by inhibiting the conversion of HMG-CoA to mevalonate, which is a part of cholesterol synthesis. These drugs are also known as HMG-CoA reductase inhibitors.

Fibrates

Fly-Brats

Fibrates act by breaking down triglycerides with lipoprotein lipase activation through PPAR-alpha. Nicotinic acid supplementation can also be a choice for patients who are refractory to conventional treatment. Other medications that can be useful are fish oil supplements and niacin. Fish oil supplements help to reduce VLDL and triglyceride levels.