

HYPERLIPIDEMIA



Centurion
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Shaping Lives...
Empowering Communities...

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INTRODUCTION:

Hyper- increase , **lipidaemia**- lipid /cholesterol

Hyperlipidemia is an excess amount of lipid or fats in blood. It is also known as dyslipidaemia.

HDL- High density lipoprotein (Good cholesterol)

LDL- Low density lipoprotein (Bad cholesterol)

Total cholesterol in body = less than 200mg/Dl

HDL- 60mg/Dl

LDL- Less than 100mg/Dl

Triglycerides- Less than 150mg/Dl

ETIOLOGY:

- Smoking
- Alcohol consumption
- Eating fat diet
- Eating junk food
- Obesity/overweight
- Stress
- Genetic or family history.

PATHOGENESIS:

- Due to different etiological factors and mainly due to taking more fatty meal, it occurs.
- After proper digestion of the food, nutrients are absorbed in intestine and goes to the systemic circulation.

- After taking fatty meal, fats are absorbed in intestine and then goes to systemic circulation.
- Through the blood, it goes to liver. Liver bind the lipids with a protein to convert lipid into lipoprotein.
- Liver produce two types of lipoprotein i.e HDL & LDL.
- HDL contains high amount of lipids and low amount of triglyceride, which is good for health.
- It does different desirable activity in our body like maintain plasma membrane of cell, producing sex hormones, lowering LDL in blood, producing bile juice etc.
- LDL contains low amount of lipids and high amount of triglyceride, which is not good for health.
- When liver produces high amount of LDL, It cause higher concentration of lipid or fat in blood termed as Hyperlipidemia.

CLINICAL MANIFESTATION:

- Fatigue
- weakness,
- Chest pain
- Shortness in breathing
- Loss of appetite
- Constantly want to sleep
- Excess sweating, irregular heartbeat

CLINICAL EVALUATION:

- Family history, physical examination
- ECG

- Echocardiogram
- Ultrasound of heart
- Constant monitoring blood [pressure
- Blood test (cholesterol, HDL, LDL)

PHARMACOLOGICAL MANAGEMENT:

- **Cholesterol lowering agent:** Statins
- Niacin
- **Bile acid binding agent:** Cholestipol
- **Cholesterol absorption inhibitors:** Ezetimibe
- **Fibric acid derivatives:** Gemfibrozil

NON-PHARMACOLOGICAL MANAGEMENT:

- Eat healthy diet.
- Avoid saturated fats that are found primarily in red meat, bacon, sausage, and full-fat dairy products.
- Switch to low-fat or fat-free dairy.
- Use monounsaturated fats like olive and canola oil for cooking.
- Cut out the trans fats. Trans fats are found in fried food and processed foods, like cookies, crackers, and other snacks.
- Take Omega-3 fatty acids.
- Eat more fruits and veggies. They're high in fiber and vitamins and low in saturated fat.
- Losing weight can help reduce LDL, total cholesterol, and triglyceride levels. It can also boost HDL, which helps remove bad cholesterol from the blood.

- Regular exercise and activity help lower LDL, raise HDL, and encourage weight loss.
- Quit smoking.