Management of Hypertriglyceridemia:Common Questions and Answers

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Hyper TG Definition

TABLE 1

American College of Cardiology/American Heart Association Classification of Fasting Triglyceride Levels

Classification	Triglyceride level
Normal	Less than 150 mg per dL (1.69 mmol per L)
High	150 to 499 mg per dL (1.69 to 5.64 mmol per L)
Severe	500 mg per dL (5.65 mmol per L) or greater

Information from reference 1.

Prevalence ?

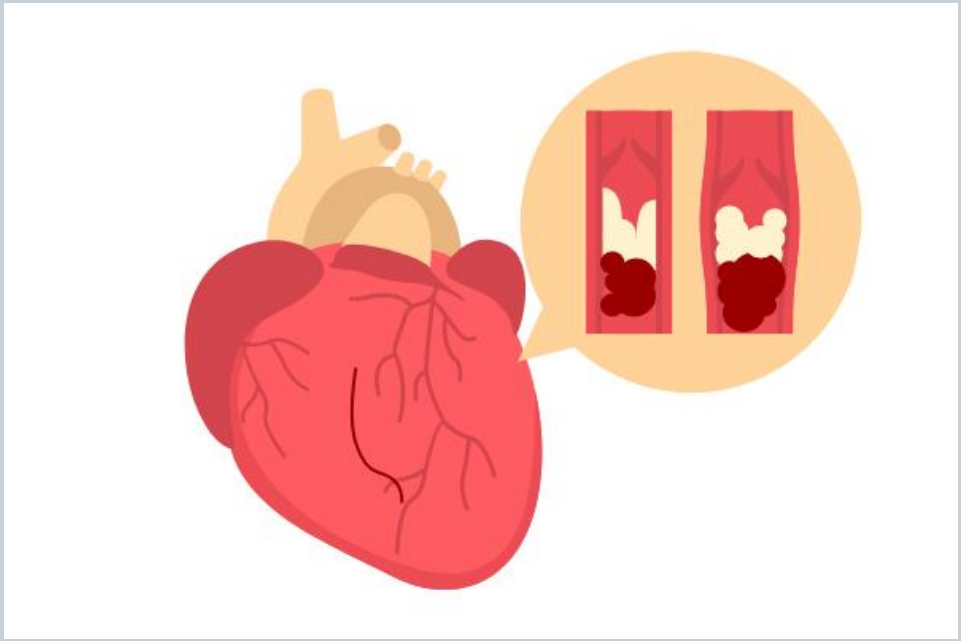
- 33% of adults in the United States 150 mg per dL or higher
- 17.9% elevated triglyceride levels
- 1.7% to 2.1% severely elevated triglyceride levels
- 0.4% of triglyceride levels of 1,000 mg per dL or higher

Risk Factors

- Obesity
- metabolic syndrome
- type 2 diabetes mellitus
- excessive alcohol use
- physical inactivity
- being overweight
- certain medications
- genetic disorders

Clinical Significance

- Risk-enhancing factor for CVD
- Pancreatitis



Management

Life Style

- Dietary Pattern
- Exercise

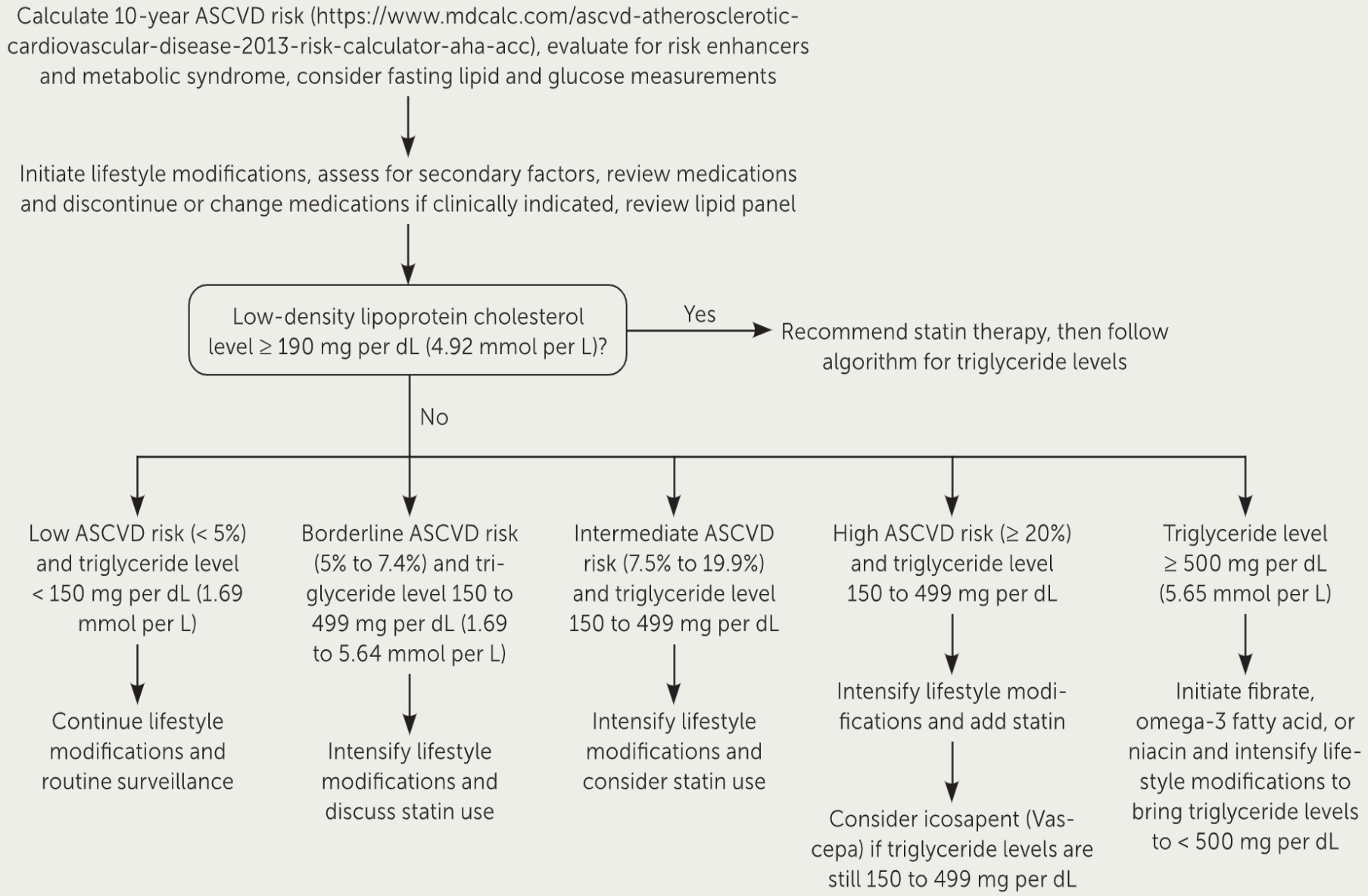
Medical management

Therapy	Triglyceride reduction (%)	HDL-C increase (%)	LDL-C increase/ decrease (%)	Mortality reduction?
Fibrates Fenofibrate Gemfibrozil	25 to 50	5 to 20	Variable	No
Omega-3 fatty acids (DHA plus EPA)	20 to 50	Increase to no change	5 to 10 increase to no change	No
Statins Atorvastatin Fluvastatin Lovastatin Pravastatin Rosuvastatin Simvastatin Pitavastatin	10 to 20	5 to 15	18 to 55 decrease	Yes NNT = 83 to prevent one all-cause death over fiveyears in patients with known CVD (secondary prevention)
Niacin	10 to 35	10 to 40	5 to 20 decrease	No

When Should Medications Be Prescribed?

- <500 mg per dl
  - Statin therapy may be considered in patients 40 to 75 years of age in borderline to intermediate risk of CVD
  - No evidence for the use of statins in combination with fibratesor niacin to reduce CVD
  - not support use of omega-3 fatty acids for the primary prevention of CVD
  - For patients with established CVD and elevated triglyceride levels, icosapent reduces car-diovascular mortality (number needed to treat [NNT] = 111 to prevent one death over five years
- >500 mg per dl
  - fibrates, omega-3 fatty acids,or niacin may be considered to lower pancreatitis risk

Management based on CVD risk



KEY RECOMMENDATIONS FOR PRACTICE

- Encourage **weight loss** of 5% or more to lower triglyceride levels and improve risk factors for CVD
- Advise a **lower-carbohydrate and higher-fat or higher-protein diet** for those with triglyceride levels lower than 500 mg per Dl
- Prescribe **fibrates and omega-3 fatty acids** for patients with triglyceride levels of 500 mg per dL or higher to reduce the risk of pancreatitis
- Consider **statins** in patients with triglyceride levels between 150 and 499 mg per dL and borderline or intermediate cardiovascular risk
- Consider **icosapent (Vascepa)** for patients with elevated triglyceride levels (150 to 499 mg per dL) and established CVD who are taking statins

*Take home message

benefits occurred only in patients with established CVD and not in those with diabetes and other risk factors

Question