

Lipid lowering therapy in diabetics

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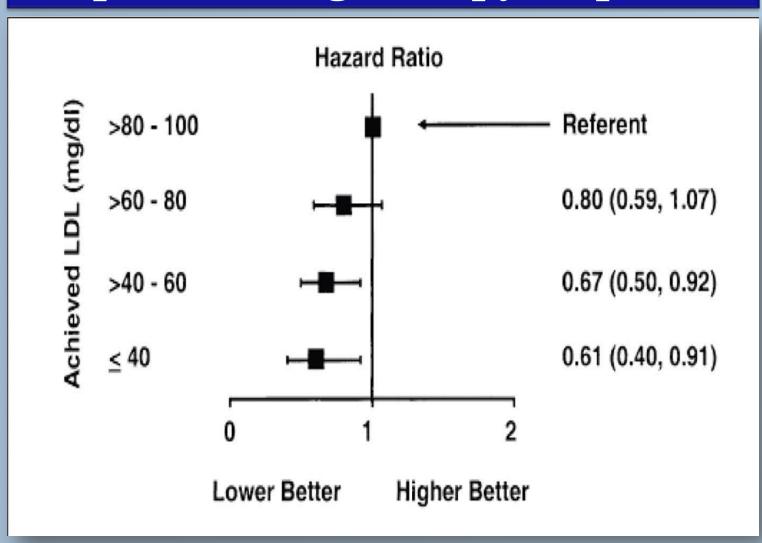




BACKGROUND

- Diabetes is associated with substantial risk for morbidity and premature mortality
- Most adverse diabetes outcomes are due to vascular complications
- Modifying cardiovascular risk by treating hypertension or by using lipid-lowering agents is of tremendous importance

Is lipid lowering therapy helpful?



Hazard ratios for the primary end point by subgroup of achieved LDL cholesterol (adjusted for age, sex, baseline calculated LDL cholesterol, diabetes, and prior MI) in the Pravastatin or Atorvastatin Evaluation and Infection Therapy-Thrombolysis in Myocardial Infarction 22 trial

RECOMMENDATIONS

Screening recommendations

American Diabetes Association (ADA) recommends screening fasting lipid levels in patients with diabetes

- Screen most adults at least annually
- Adults may be screened every 2 years if they have low-risk lipid values
 - low-density lipoprotein cholesterol (LDL-C) < 100 mg/dL
 - high-density lipoprotein cholesterol (HDL-C) > 50 mg/dL
 - triglycerides < 150 mg/dL

Recommendations for target lipid levels

American Diabetes Association (ADA) recommendations in nonpregnant adults with diabetes mellitus

- Low-density lipoprotein cholesterol (LDL-C) < 100 mg/dL
- Triglycerides < 150 mg/dL
- High-density lipoprotein cholesterol (HDL-C) > 40 mg/dL in men, > 50 mg/dL in women

2006 American Heart Association/American College of Cardiology (AHA/ACC) secondary prevention guideline

- Target LDL-C < 100 mg/dL in patients with diabetes
- Target LDL-C < 70 mg/dL is an alternative goal

THERAPY

Lifestyle modifications (ADA recommendations)

- Reducing saturated fat, trans fat, and cholesterol intake
- Increasing omega-3 fatty acids, viscous fiber, and plant stanols/sterols
- Weight loss if appropriate
- Increased physical activity

Statin therapy (ADA recommendations)

- With overt cardiovascular disease
- Without cardiovascular disease who are > 40 years old with one or more other cardiovascular disease risk factors

Drugs other than statins

- Ezetimibe
- Fibrates (Gemfibrozil, Fenofibrate, Bezofibrate)
- Niacin

Other therapies

- Fish oil
- Red yeast rice
- Colestilan
- Cranberry extracts
- High-cocoa polyphenol-rich chocolate

BIBLIOGRAPHY

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- Nesto R W Clin Diabetes 2008;26:8-13