Statins In The Elderly - New Guidelines In Mind

Francisco Martinez-Wittinghan MD PhD
Board Certified in Family Medicine
Baptist Primary Care at Nocatee
98 Nocatee Village Dr
Ponte Vedra FL 32081
Learning Objectives

Upon completion of this session participants should be able to . . .

» Assess Cardiovascular Risk in the Elderly

» Stratify the use of statins in primary vs. secondary in the elderly

» Identify the concomitant factors in the decision making process for statin therapy and CV risk prevention in the elderly
Female causes of death by age

http://flowingdata.com/2016/01/05/causes-of-death/
Male causes of death by age

http://flowingdata.com/2016/01/05/causes-of-death/
Previous guidelines

• keep LDL cholesterol below 160 mg/dL for low-risk patients,
• keep LDL below 130mg/dL for people at moderate risk (10 year risk of cardiovascular event between 10 and 20%)
• Reduce LDL to 100mg/dL for those with a history of cardiovascular disease or diabetes, or with a 10-year risk of greater than 20%.
• For high-risk patients, reduce LDL to less than 70mg/dL.
Summary of Statin Initiation Recommendations for the Treatment of Blood Cholesterol to Reduce ASCVD Risk in Adults (See Figures 3, 4, and 5 for More Detailed Management Information).

Heart-healthy lifestyle habits are the foundation of ASCVD prevention (See 2013 AHA/ACC Lifestyle Management Guidelines).

- Age ≥21 y and a candidate for statin therapy
- High-density lipoprotein (HDL-C) ≥40 mg/dL
- Body mass index (BMI) <25 kg/m²
- Family history of premature ASCVD
- Diabetes
- Hypertension
- Lifetime ASCVD risk ≥7.5%

**Primary Prevention**

- Age <40 or ≥75 y and LDL-C ≥190 mg/dL
- Diabetes
- No diabetes, LDL-C 70 to 189 mg/dL, and not receiving statin therapy

- 10-y ASCVD risk <5%
- 10-y ASCVD risk 5% to <7.5%
- 10-y ASCVD risk ≥7.5%

**Clinician-Patient Discussion**

Prior to initiating statin therapy, discuss:
1. Potential for ASCVD risk-reduction benefits
2. Potential for adverse effects and drug-dose interactions
3. Heart-healthy lifestyle
4. Management of other risk factors
5. Patient preferences
6. If decision is unclear, consider primary LDL-C ≥190 mg/dL, family history of premature ASCVD, lifetime ASCVD risk, abnormal CAC score or ABI, or hs-CRP ≥2 mg/L

Emphasize adherence to lifestyle
Manage other risk factors
Monitor adherence

Encourage adherence to lifestyle
Initiate statin at appropriate intensity
Manage other risk factors
Monitor adherence* (See Fig 5)
Who would benefit from statins

- Individuals with clinical ASCVD
- Individuals with primary elevations of LDL–C ≥190 mg/dL.
- Individuals 40 to 75 years of age with diabetes and LDL–C 70 to 189 mg/dL without clinical ASCVD
- Individuals without clinical ASCVD or diabetes who are 40 to 75 years of age with LDL–C 70 to 189 mg/dL and have an estimated 10-year ASCVD risk of 7.5% or higher.
Individuals >75 Years of Age

Fewer people >75 years of age were enrolled in the statin RCTs reviewed.

Studies support the continuation of statins beyond 75 years of age in persons who are already taking and tolerating these drugs.

Moderate-intensity statin use is supported for secondary prevention but not clear for high-intensity statin therapy
Individuals >75 Years of Age

“Few data were available to indicate an ASCVD event reduction benefit in primary prevention among individuals >75 years of age who do not have clinical ASCVD.

Additional factors need to be considered before initiation of statins for primary prevention in individuals >75: potential ASCVD risk-reduction benefits, increasing comorbidities, safety considerations, and patient preferences.

“The Pooled Cohort Equations can also provide information on expected 10-year ASCVD risk for those 76 to 79 years of age that may inform the treatment decision”
Is not only about statins

“Lifestyle modification (adhering to a heart healthy diet, regular exercise habits, avoidance of tobacco products, and maintenance of a healthy weight) is critically important for everyone, both before and during treatment.”
Criticism of the New Guidelines

Old Data

Too many people will be put on statins.

Conflict of interest: six out of the 15 authors reported having recent or current ties to manufacturers of statin drugs.

https://www.sciencebasedmedicine.org/new-cholesterol-guidelines/
Interactive Case Studies

Online Cardiovascular Risk Calculator
RRs of All-Cause Death and Cardiovascular Death

Gray squares represent RRs in trials. The 95% CIs for individual trials are denoted by lines and those for the pooled RRs by open diamonds. Meta-analysis is performed by fixed effects model. Abbreviations as in Figure 2.
“In elderly subjects at high CV risk and without established CV disease, statins substantially reduce the incidence of MI and stroke in a short-term follow-up, with a favorable, albeit nonsignificant, trend for reduction in mortality.”
Benefit of statin therapy in individuals aged 85 and older with ASCVD.

The high benefit-to-risk ratio does not necessarily disappear after 85.

“Individuals who are at high risk but have not had a heart attack or stroke, such as those with diabetes mellitus or chronic renal failure (but excluding hemodialysis), in whom benefit in younger individuals significantly exceeds risks, statins can be considered”
Statins in Very Elderly Adults (Debate)
Neil J. Stone, MD, MACP, FACC; Sunny Intwala, MD; Dan Katz, BA

Strong reasons for shared decision-making
Poly-pharmacy
Non-adherence
Drug–drug interactions
individual preference

“The decision to treat or not treat should always start with a careful review of likely benefits and the potential for safety risks. Thoughtful, evidence-based prescribing is emphasized in the 2013 cholesterol guidelines”
Thank you

Francisco Martinez-Wittinghan MD PhD
Board Certified in Family Medicine

Baptist Primary Care at Nocatee
98 Nocatee Village Dr
Ponte Vedra FL 32081

References: The Power of Habit by Charles Duhigg
Images: Thomsomcars.com, Wordpress.com, CNN.com, gispecialists.com