

DIFFERENT FACES OF THE SAME PROBLEM: LIPID LOWERING THERAPY IN THE ELDERLY

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Background

- At least 85 million patients in Europe suffer from cardiovascular diseases which are the cause of 3,9 million deaths per year. Most of them are elderly people over 65 years old, who have indication for, and are using lipid-lowering drug therapy. However, there is a question whether benefits of this treatment arises its harms considering frequent comorbidities in elderly population.

Material & Methods

- Methods: Four types of patients that we meet daily in medical practice will be outlined. Their cardiovascular risk according to SCORE (Systematic Coronary Risk Estimation), patient assessment, blood pressure (BP), laboratory values: TC, HDL, LDL, eGFR and life expectancy, will be calculated. Given the calculated parameters and combined with an individual approach, decision of using lipid therapy will be made.

Results

- The first patient, female, 65 years old, BP 140/80 mmHg, TC 5.9 mmol/L, HDL 1.4 mmol/L, LDL 3.5 mmol/L, eGFR 89 mL/min/1.73m², non-smoker. 10-year CV risk: 4%. This patient belongs to the moderate risk group (SCORE ≥1% and <5%) and her LDL values are 3.5 mmol/L with no indication for initiation of therapy (IIa/A).
- The second patient, male, 65 years old, BP 140/80 mmHg, TC 4.9 mmol/L, HDL 0.9 mmol/L, LDL 3.1 mmol/L, eGFR 65 mL/min/1.73m², non-smoker. 10-year CV risk: 9%. This patient is in the high-risk group (SCORE ≥5% and <10%) and his LDL is 3.1 mmol/L, which means that therapy is recommended (I/A).
- The third patient, female, 80 years old, BP 150/90 mmHg, TC 6.9 mmol/L, HDL 0.7 mmol/L, LDL 4.5 mmol/L, eGFR 55 mL/min/1.73m², smoker with documented ASCVD. This patient due to ASCVD belongs to the very high risk group and therapy is recommended (LDL goal <1.4mmol/L) (I/A).
- The fourth patient, male, 80 years old, BP 150/90 mmHg, TC 7.8 mmol/L, HDL 1.1 mmol/L, LDL 5.1 mmol/L, eGFR <30 mL/min/1.73m², smoker with documented dementia and heart failure. Due to severe CKD (eGFR <30 mL/min/1.73m²), this patient belongs to the very high risk group, LDL is 5.1 mmol/L, which requires the gradual introduction of therapy at lower doses (I/C). Life expectancy is 3.3 years.

Conclusion

- According to the guidelines, particular attention should be paid to life expectancy and in some patients approach should be individual. In these cases, it is quite clear that it makes sense to introduce the therapy to the second and third patient, since their life expectancy is long enough for the therapy to reach its maximum effect, which takes 2-3 years.
- However, if the last case is looked at, the efficacy of the therapy depends on life expectancy and the dose should be modified depending on renal function and other comorbidities.