STATINS AND THE ELDERLY: IS THEIR USE APPROPRIATE?
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Introduction

Statins are widely prescribed to the elderly in primary prevention (PP) and secondary prevention (SP) of cardiovascular diseases, although data on benefits of this therapeutic class in patients over 65 remain rare. They are not harmless because of serious side effects, and drug interaction, especially to polymedicated patients.

Objectives

Evaluation of statin prescriptions in a geriatric hospital

Method

- Type of study: Prospective, observational
- Population: patients of geriatric units
- Inclusion criteria: age over 65 year-old treated by statins
- Period: from June to September 2017
- Collected data: cardiovascular risk factors (CV RF), age at the introduction of the treatment, dosage, indication, occurrence of side effects, risk factors of occurrence of side effects (SE)
- Sources: computerized medical record and discussion with prescribers

Results

- Median age: 83 [66-98]
- Sex ratio H/F: 0,83
- CV RF per patient: 2,3 [1-4]
- Comorbidities per patient: 2,7

Patients: n = 86

Treatment: ATORVASTATIN (10, 20, 40 or 80 mg)

<table>
<thead>
<tr>
<th>Indication</th>
<th>Primary prevention</th>
<th>Secondary prevention</th>
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<tbody>
<tr>
<td>Post-MI</td>
<td>40%</td>
<td>14%</td>
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<tr>
<td>Post-AVC</td>
<td>46%</td>
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Age at the introduction

<table>
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<tr>
<th>&lt; 80 year-old</th>
<th>≥ 80 year-old</th>
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<tbody>
<tr>
<td>In PP</td>
<td>77%</td>
</tr>
<tr>
<td>In SP</td>
<td>6%</td>
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</tbody>
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Side effects: n = 8

Type of SE

1. Hepatic cytolysis
2. Falls
3. Definitive stop of atorvastatin
4. Temporary stop of atorvastatin
5. Reduction of dosage
6. Inchanged

Interventions

- n=1
- n=2
- n=2
- n=3

Inappropriate prescription of statin after 80 year-old in PP

N = 34

Occurrence of SE

1. Low CV RF (1)
2. Several CV comorbidities (≥3)

Statin introduction after 80 year-old

N = 23

Occurrence of SE

1. Low life expectancy (≥90 year-old)
2. Several CV comorbidities (≥3)

Inappropriate prescription of statin after 80 year-old in SP

N = 53

Discussion

Inappropriate statin prescription after 80 year-old: 82,4% in PP and 100% in SP.

Conclusion

This study leads to reconsider the pursuit of statin after 80 year old to limit iatrogenic risks. Recommendations are not clear and practitioners must evaluate each situation according to number of CV RF, comorbidities, general condition and life expectancy. Further studies could allow to define precise limits to the pursuit of statin after 80 year old and a score should be create to guide the decision.