Abstract: P1224

Statin treatment in children with familial hypercholesterolemia in Scandinavia

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Topic(s):
Lipids: Drug therapy

Citation:

Introduction: New European guidelines recommend that patients with familial hypercholesterolemia (FH) should initiate treatment with statins at age 8-10 years. The number of children using statins has not yet been investigated. The aim of the present study was to describe the number of statin users <19 years of age in the Scandinavian countries: Sweden, Denmark and Norway.

Methods: In the Scandinavian countries, statins are only available by prescription, and there are national registries for the use of perscriptional drugs. In the present study, we assumed that the number of children using statins is equivalent to a positive FH diagnosis in these countries. Using the estimated frequency of FH of 1:250, we calculated the number of expected children with FH per year. Next, the percentage of all FH children who were treated according to the national registries were calculated. We also calculated changes between 2006 and 2016.

Results: As shown in Table 1, 1086 children 5-19 years in Scandinavia used statins in 2016. In the ages 10-19 years, statins were more frequent used in Norwegian FH children than in children from Denmark and Sweden (Figure 1). Nevertheless, the number of children aged 5-19 years using statins increased from about 2% to 4% between 2006 and 2016 in Sweden and Denmark (n=109 and n=136 respectively) and from about 5% to 10% in Norway (n=340).

Discussion: We observed a modest increase in statin users aged 5-19 years in the Scandinavian countries during a 10-year period. Nevertheless, our findings indicate that it will take decades to implement the current Statin-recommendation. Possible reasons for the difference in the degree of treatment between the countries will be discussed during the presentation, in particular with respect to genetic testing and cascade screening.

Conclusions: Despite increased statin use during the last years, there is still a severe undertreatment of children with FH in the Scandinavian countries.

<table>
<thead>
<tr>
<th>Age (year)</th>
<th>Male, N (%)</th>
<th>Female, N (%)</th>
<th>Both Sexes N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 - 9</td>
<td>36 (3)</td>
<td>30 (3)</td>
<td>67 (6)</td>
</tr>
<tr>
<td>10 - 14</td>
<td>158 (15)</td>
<td>127 (12)</td>
<td>294 (27)</td>
</tr>
<tr>
<td>15 - 19</td>
<td>327 (30)</td>
<td>395 (36)</td>
<td>725 (67)</td>
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<tr>
<td>0 - 19</td>
<td>521 (48)</td>
<td>552 (51)</td>
<td>1 086 (100)</td>
</tr>
</tbody>
</table>
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