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Data Article

Data on the association between a simplified Mediterranean diet score and the incidence of combined, cardio and cerebro vascular events

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Abstract

Data presented in this article are related to the research article entitled “A priori-defined Mediterranean-like dietary pattern predicts cardiovascular events better in north Europe than in Mediterranean countries” [Veglia et al., 2018]. Data contain information about the incidence of cardiovascular events in a high-risk European population (IMPROVE study) [Baldassarre et al., 2010, 2012, 2013]. Combined vascular events, as well as cardio- and cerebro-vascular events were stratified according to a priori-defined simple Mediterranean Diet (MD) score, based on just seven nutritional items (minimal adherence was 0 and maximal adherence was 7).

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1. Data

Among the 3,703 subjects enrolled in the IMPROVE study [2–4], 215 (7.96%) developed a first VE: 3 sudden cardiac death, 34 myocardial infarction (7 fatal), 26 hospitalization for angioplasty, 13 coronary bypass grafting, 49 diagnoses of angina pectoris, 32 ischemic stroke (0 fatal), 41 transient ischemic attack, 4 revascularization due to peripheral artery disease and 13 diagnoses of intermittent claudication.

Table 1 shows the combined, cardio- and cerebro-vascular events stratified by MD score classes. The number of combined events was the highest in subjects with score 0–1 (9.2%), lower in those with
Table 1
Vascular events stratified according to the MD score.

<table>
<thead>
<tr>
<th>MD Score</th>
<th>0-1 n (%)</th>
<th>2-3 n (%)</th>
<th>4-7 n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined events (n = 215)</td>
<td>101 (9.2)</td>
<td>94 (5.0)</td>
<td>20 (2.7)</td>
</tr>
<tr>
<td>Cardiovascular events (n = 125)</td>
<td>58 (5.3)</td>
<td>56 (3.0)</td>
<td>11 (1.5)</td>
</tr>
<tr>
<td>Cerebrovascular events (n = 73)</td>
<td>32 (2.9)</td>
<td>33 (1.8)</td>
<td>8 (1.1)</td>
</tr>
</tbody>
</table>

Fig. 1. Kaplan-Meier incidence curves of combined, cardio and cerebro vascular events stratified by MD adherence score classes.

score 2–3 (5.0%) and the lowest in those with score 4–7 (2.7%). Similar rates were obtained considering cardio- and cerebro-VEs separately [1].

Fig. 1 specifies these results in detail, showing the Kaplan-Meier incidence curves of the combined endpoint, and of cardio- and cerebro-VEs, stratified by MD adherence score classes.Regardless of the
endpoint considered, the rate of events was the highest in subjects with score 0–1, lower in those with score 2–3 and the lowest in those with score 4–7.

2. Experimental design, materials and methods

The IMPROVE was a multicenter, prospective cohort study including 3,703 patients (1,774 men, 1,929 women, aged 55–79 years) with ≥3 vascular risk factors, free from cardio- or cerebro-VEs [2–4]. Participants were recruited in 5 European countries and followed for 36 months. The combined endpoint is a composite of myocardial infarction, sudden cardiac death, angina pectoris, ischemic stroke, transient ischemic attack, new diagnosis of intermittent claudication or any surgical intervention or revascularization of coronary or peripheral arteries.

Cardiovascular events include acute myocardial infarction, angina pectoris, coronary angioplasty or bypass grafting and sudden cardiac death. Cerebrovascular events include ischemic stroke, transitory ischemic attack.

The MD adherence score was based on intake of 7 items: fruits, fish, wine, olive oil, meat, milk and eggs. For fruit or fish, high consumption (top tertile of their distributions, i.e. fruit ≥3 servings/day and fish >2 times/week) received one point, other intakes received 0 points; for meat, eggs or milk a low intake (bottom tertile of their respective distributions, i.e. meat <2 times/week, eggs <1 times/week, milk ≤3 dl/day) received one point. A predominant consumption of olive oil, rather than of other types of fat, and a moderate consumption of wine (1–2 glasses/day) also received one point each. Based on the scale obtained, score 0 indicates minimal adherence and score 7 maximal adherence to MD.

Transparency document

Transparency document associated with this article can be found in the online version at https://doi.org/10.1016/j.dib.2019.103789.

References