Use of low-dose prasugrel vs. clopidogrel in elderly patients undergoing complex or non-complex PCI for acute coronary syndromes: insights from the Elderly ACS 2 study.

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Topic(s): Acute Coronary Syndromes: Pharmacotherapy

Citation: None

Background. Prasugrel was superior to clopidogrel in the setting of acute coronary syndromes (ACS) and recent data highlighted its possible role in the setting of complex percutaneous coronary intervention (PCI). Nonetheless, evidence supporting its use in high bleeding risk population are lacking.

Purpose. The aim of this post-hoc subgroup analysis was to evaluate the impact of prasugrel administration in elderly patients undergoing complex PCI for ACS. A primary composite endpoint of composite of mortality, myocardial infarction, disabling stroke and re-hospitalization for cardiovascular causes or bleeding within one year and secondary endpoints of all-cause mortality and any bleeding at 1 year were analyzed.

Methods. In the multicenter Elderly ACS 2 Study 1,443 patients aged > 74 y were randomly assigned to receive low-dose prasugrel (5 mg) or clopidogrel (75 mg) and were prospectively followed for 1 year (Table 1). Complex PCI was defined if =3 lesions were treated, if =3 stents were deployed, or if any bifurcation, trifurcation, chronic total obstruction or moderate-to-severe calcified lesions were treated.

Results. Patients undergoing complex PCI (n=607) did not experience worse outcome, as compared to those with simpler PCI, in terms of primary endpoint (p=0.21, Figure 1A). Furthermore, in this subgroup, no significant difference was observed with prasugrel vs clopidogrel with regard to the primary endpoint (HR 1.17; CI 0.819-1.67; p=0.39, Figure 1A), all-cause death and bleeding (Figure 1C and 1D). No significant interaction was observed between treatment and PCI complexity (interaction p=0.34).

Conclusions. In elderly patients presenting with ACS low-dose prasugrel was comparable to clopidogrel in terms of all-cause mortality and any bleeding at 1 year.
Abstract: Use of low-dose prasugrel vs. clopidogrel in elderly patients undergoing complex or non-complex PCI for acute coronary syndromes: insights from the Elderly ACS 2 study.

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Data are expressed as mean±SD or [IQR] and count /valid %)

<table>
<thead>
<tr>
<th></th>
<th>Overall Population</th>
<th>Complex PCI</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous Myocardial Infarction</td>
<td>274 (19.0)</td>
<td>171 (20.4)</td>
<td>103 (17.0)</td>
</tr>
<tr>
<td>Randomized to prasugrel</td>
<td>713 (49.4)</td>
<td>404 (48.2)</td>
<td>404 (48.2)</td>
</tr>
</tbody>
</table>

A

Primary endpoint in overall population

% survival

p = 0.21

B

Primary endpoint in complex PCI

% survival

p = 0.39

C

All-cause death

% survival

p = 0.17

D

Bleeding

% survival

p = 0.85