ACUTE CORONARY SYNDROME: USE OF THE NEW ANTIPLATELET DRUGS IN CLINICAL PRACTICE

C. Perelló Alomar1, I. Martinez López2, A. Carrillo López2, I. Coll Mulet1, C. Barceló Campomar1, M. Mondragón Navarro2.
1Hospital Universitario Son Espases, Pharmacy Department, Palma de Mallorca, Spain.
2Hospital Universitario Son Espases, Intensive Care Unit, Palma de Mallorca, Spain.

BACKGROUND
Prasugrel and ticagrelor are new antiplatelet agents developed for patients with Acute Coronary Syndrome (ACS) and high risk of thrombosis. Their benefits in terms of mortality and major cardiovascular events have been well established, but some concerns remain regarding their safety.

PURPOSE
To analyse antiplatelet prescriptions focusing on new drugs and with a subgroup analysis (diabetes, renal function, age, weight, haemorrhage risk).

MATERIALS AND METHODS
A retrospective observational study was carried out in our healthcare area from January to June 2013. Patients included had ACS and required antiplatelet therapy. Demographic and clinical data were obtained from electronic medical records (Historia de Salud®, PowerChart-Millenium® and Intensive Care Unit programme). CRUSADE scale was used to calculate the bleeding risk.

RESULTS
379 patients
72.8% male
mean age 64.9±12.8 years
350 patients received clopidogrel
52 were treated with new drugs
At discharge:
280 with dual antiplatelet therapy
239 clopidogrel + AAS
27 prasugrel + AAS
15 ticagrelor + AAS
81 with single therapy
64 AAS
17 clopidogrel
9 interrupted treatment
134 with ST-Segment Elevation Myocardial Infarction
245 with Non-ST Elevation Myocardial Infarction
29 prasugrel
23 ticagrelor
37 switched to new drugs
9 hospital deaths

Table 1. Subgroup analysis on patients with dual therapy at discharge.

<table>
<thead>
<tr>
<th>Clopidogrel</th>
<th>Prasugrel</th>
<th>Ticagrelor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetic (n=98)</td>
<td>79</td>
<td>16</td>
</tr>
<tr>
<td>CICr&lt;60 ml/min at admission (n=46)</td>
<td>44</td>
<td>2</td>
</tr>
<tr>
<td>Age &gt;75years (n=60)</td>
<td>58</td>
<td>0</td>
</tr>
<tr>
<td>Weight &lt;60Kg (n=25)</td>
<td>25</td>
<td>0</td>
</tr>
</tbody>
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Risk of haemorrhage:
- High (CRUSADE≥41points) (n=35)
  - Clopidogrel: 33
  - Prasugrel: 2
  - Ticagrelor: 0
- Low/moderate (CRUSADE≤30points) (n=212)
  - Clopidogrel: 172
  - Prasugrel: 25
  - Ticagrelor: 15

CONCLUSIONS
1. Use of new antiplatelet drugs in our healthcare area is still moderate.
2. They are prescribed only in selected cases with low bleeding risk.
3. The results show only a disposition towards prescribing prasugrel for diabetic patients according to the clinical trials results, but not in other subgroups that can benefit from new drugs.

Conflict of interests: none