Objective

Estimation of the distribution of Spanish diabetic patients according to individualized glycemic targets recommended by the ADA/EASD consensus with and without considering the risk of hypoglycemia.

Methods

- Cross-sectional study (2011-2012) in Primary Care centers throughout Spain.
- 5382 Type 2 diabetic patients under pharmacological antihyperglycemic treatment.
- Single visit:
  - Measurement of capillary HbA1c (A1CNow®).
  - Clinical variables analyzed:
    - Age.
    - Diabetes duration.
    - Treatment.
    - Chronic complications (macroalbuminuria, chronic kidney disease, diabetic foot, diabetic retinopathy, polineuropathy, peripheral vascular disease, cerebrovascular disease, coronary vascular disease).
    - Hypoglycemia that required medical assistance during the 12 months prior to the inclusion.
- Classification of patients into targets of HbA1c according to the ADA/EASD consensus:
  - Taking into account hypoglycemia risk (having a history of past hypoglycemia or being treated with ≥ 2 doses of insulin).
  - Not taking into account hypoglycemia risk.
- Statistics:
  - Descriptive: variables expressed as % or mean ± SD.
  - Assessment of concordance between both strategies of classification: Cohen’s kappa coefficient of correlation.

Table 1. Patient classification into targets of HbA1c according to ADA/EASD

<table>
<thead>
<tr>
<th>HbA1c (%)</th>
<th>Age (years)</th>
<th>Diabetes duration (years)</th>
<th>Chronic complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADA/EASD-1</td>
<td>≤ 6.5</td>
<td>Any</td>
<td>≤ 5</td>
</tr>
<tr>
<td>ADA/EASD-2</td>
<td>≤ 7</td>
<td>≤ 75</td>
<td>5-9</td>
</tr>
<tr>
<td>ADA/EASD-3</td>
<td>&lt; 8</td>
<td>&gt; 75</td>
<td>Any</td>
</tr>
<tr>
<td>Any</td>
<td>Any</td>
<td>&gt; 10</td>
<td>Any</td>
</tr>
</tbody>
</table>

* Risk of hypoglycemia is taken into account, patients with past hypoglycemia or treated with insulin in ≥ 2 doses are directly classified into category 3, irrespective of other patient characteristics.

Table 2. Glycemic control

<table>
<thead>
<tr>
<th>HbA1c (%)</th>
<th>Patients with HbA1c &lt; 7 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.3 ± 1.2</td>
<td>48</td>
</tr>
</tbody>
</table>

Conclusions

- Individualization of glycemic targets increases the proportion of patients that are considered adequately controlled.
- Inclusion of information regarding hypoglycemia risk into the ADA/EASD strategy does not affect patient classification.