Real-world clinical evolution of type 1 diabetes patients on twenty years.

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Introduction

Type 1 diabetes mellitus (T1DM) is a chronic disease with important complications.

Objective

Describe clinical characteristics, metabolic control and comorbidities of our paediatric diabetes population.

Methods

T1DM patients diagnosed from 1996-2016 were included. Celiac and thyroid disease screening were analyzed. Clinical and biochemical data were compared during evolution. SPSS.21 for statistical study.

Results

- 187 patients: 55.6% males were follow at least one year and 40 (21.3%) during more than 10 years.
- Mean age at onset 8,57 (0.5-15) years.
- Table 1 contains clinical and biochemical date.

<table>
<thead>
<tr>
<th>Age onset (years (%))</th>
<th>Total</th>
<th>Onset 1996-2005</th>
<th>Onset 2006-2016</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5</td>
<td>25.14</td>
<td>26.2</td>
<td>16.9</td>
<td>P 0.02</td>
</tr>
<tr>
<td>5.1-9.9</td>
<td>32.62</td>
<td>30.4</td>
<td>55.41</td>
<td>P 0.001</td>
</tr>
<tr>
<td>10-15</td>
<td>39.24</td>
<td>43.4</td>
<td>26.76</td>
<td>P 0.001</td>
</tr>
</tbody>
</table>

Clinical presentation

- Ketoacidosis
- Hyperglycemia with ketosis
- Hyperglycemia

A1c Hb at onset

- Mean 7.48% (diagnosed by biopsy.)
- Median 7.50% (n=2)
- Mean A1cHb were < 7.5%.
- Severe hypoglycemia in 2.3% without differences between treatment.

Follow up (years)

- Mean 15.75 years.
- 12.2% were immunological negative for islet antibodies at clinical presentation.

A1c Hb (% median during evolution)

- NPH
- Long acting insulin analog
- ISCI

There were no differences between age at onset and clinical presentation.

Conclusions

- CAD presentation reduce with time.
- High prevalence of associated diseases demonstrate the need for screening.
- Low complications with good metabolic control in most of patients.
- It’s necessary to re-evaluate negative immunological patients for an etiological diagnosis.