IMMUNOTHERAPY IN SEVERE UNCONTROLLED ASTHMA: EFFECTIVENESS AND SAFETY IN CLINICAL PRACTICE

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Background and importance
Immunotherapy is used in those patients with severe uncontrolled asthma (SUA) despite treatment with inhaled glucocorticoids (IGC) and beta2 adrenergic agonists (LABA) at high doses, and/or oral glucocorticoids (OGC) but it seems that its effectiveness is lost over time.

Aim and objectives
The aim of this study is measure the effectiveness and safety of immunotherapy in SUA in clinical practice.

Material and methods
A multicentre and retrospective study was performed in SUA patients from 2 Spanish centres who received treatment with immunotherapy (omalizumab, mepolizumab or benralizumab) since march-17 to oct-21. We registered: sex, age, patients that keep response after 2 years of treatment, lost of response (LOR), median follow up (mFU). Effectiveness was evaluated as a reduction in OGC, exacerbations and/or urgency visits. Safety in terms of side effects (SE) and patients reported outcomes (PRO) with Asthma Control Test (ACT) -score (<19 points = poor control) was also assessed. Dispensation program and the Diraya clinical station were used as sources of information.

Results
- 56 patients were included:
  - 46 females, with a median age of 60 (7–86) years.
  - The treatment was effective in 82% of all patients.
  - ACT-score was collected in 17 patients in our pharmacist consultation: Patients with ACT-score<19 (5) were recommended to advance their medical appointment to evaluate whether to continue with treatment.
  - 9 patients suffered SE being the most frequent recurrent respiratory infections.

<table>
<thead>
<tr>
<th></th>
<th>Omalizumab (n=23)</th>
<th>Mepolizumab (n=20)</th>
<th>Benralizumab (n=13)</th>
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<tbody>
<tr>
<td>mFU (months)</td>
<td>60</td>
<td>21</td>
<td>16</td>
</tr>
<tr>
<td>No responders (%)</td>
<td>11</td>
<td>15</td>
<td>15</td>
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<tr>
<td>Responders after 2 years of treatment (%)</td>
<td>15</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td>EDR (%)</td>
<td>70</td>
<td>15</td>
<td>7.6</td>
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<tr>
<td>Median time to loss of response (months)</td>
<td>00</td>
<td>18</td>
<td>14</td>
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Conclusion and relevance
Immunotherapy was effective in most cases with an acceptable safety profile. Due to loss of response over time, we must take advantage of the monthly or bimonthly visits of these patients to the pharmaceutical consultation to carry out a more exhaustive follow-up and thus collaborate with pulmonologists and allergists in the management of these patients.