EXPERIENCE WITH OMALIZUMAB IN THE TREATMENT OF UNCONTROLLED PERSISTENT ASTHMA

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BACKGROUND

- Allergic asthma is the most prevalent phenotype of severe asthma in which treatment with Omalizumab has been proven to be beneficial.

OBJECTIVES

- Analyse the effectiveness, efficiency and safety of Omalizumab in patients with uncontrolled moderate-to-severe asthma.

MATERIAL AND METHODS

- Retrospective observational study of all patients with uncontrolled persistent asthma who received Omalizumab for at least 52 weeks from March 2007 until September 2018.
- Variables collected were: age, sex, diagnosis, baseline IgE levels, FEV1 (baseline and at 52 weeks after Omalizumab); number of exacerbations (NEX), corticosteroid cycles (CC) and emergency visits (EV) 12 months prior to Omalizumab and at 12 months after, duration, discontinuation and side effects; and ACT quality of life questionnaire after last administration.
- The main variable was the reduction in NEX and as secondary variables reduction in CC and EV.

RESULTS

- N = 36
  - 67% females
  - Mean age 44.2 years (SD: 16.9)
  - Mean IgE level 590.7 IU/ml (SD: 1210.2)
  - 70% of patients FEV1 <80%

Average treatment duration was 52 months (SD=30)

<table>
<thead>
<tr>
<th>Variables prior and after Omalizumab</th>
<th>12 months prior</th>
<th>12 months after</th>
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<tbody>
<tr>
<td>Number of exacerbations (NEX)</td>
<td>4.5 (SD=3)</td>
<td>0.6 (SD=0.9)</td>
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<tr>
<td>Corticosteroid cycles (CC)</td>
<td>4.4 (SD=3)</td>
<td>0.7 (SD=0.9)</td>
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<tr>
<td>Emergency visits (EV)</td>
<td>2.2 (SD=1.8)</td>
<td>0.3 (SD=0.6)</td>
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20 patients discontinued treatment

<table>
<thead>
<tr>
<th>Reason for discontinuation</th>
<th>Number of patients</th>
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<tr>
<td>Because of efficacy</td>
<td>3</td>
</tr>
<tr>
<td>Inefficacy</td>
<td>12</td>
</tr>
<tr>
<td>Poor tolerance (diarrhoea, myalgias and tremors)</td>
<td>1</td>
</tr>
<tr>
<td>Hospital change</td>
<td>4</td>
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</tbody>
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50% patients with decreased lung function reached FEV1 >80% after 52 weeks

The mean cost of asthma EV/patient

- Prior to Omalizumab: 422.9€ (SD=356.8)
- After Omalizumab: 97.2€ (SD=247.4)

After last administration of Omalizumab: 72% of patients under control or reasonably well controlled and 28% not well controlled

CONCLUSIONS

- This analysis shows that Omalizumab decreases NEX and CC, achieving a substantial improvement in patients with uncontrolled moderate-to-severe asthma, as well as a reduction in the direct costs of EV.
- Interruption of treatment in three patients suggests that the effects of Omalizumab may persist over time.