812: Abstract Title: AAAAI Survey On Allergen Immunotherapy (AIT) in Patients with Specific Medical Conditions

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Background: Little data exists on AIT in patients with specific medical conditions. In this context the experience of practicing allergists might yield very useful information.

Methods: A survey (SurveyMonkey*) was sent out to all AAAAI members to explore their experience with AIT in patients with specific medical conditions. Results are expressed descriptively.

Results: 1061 of the 5148 (20.6%) surveys were sent back. Practice characteristics: 86% practices were US-based, 44% urban, 51% suburban and 5% rural. A third of all responders works in an academic setting. 54% of the surveyed mentions clinical experience of more than 16 years with an even distribution over small, middle and large practices. Next we mention the specific medical conditions with percentages of allergists who have treated/would treat/contraindicates AIT in patients with the condition. These data are followed by number of patients with the condition that did receive AIT and (%) of their treating allergists that referred major problems: severe asthma 56/10/32%, 3170 (12.3%); hypertension 87/9/4%, 4979 (0.6%); coronary artery disease 66/16/18%, 2866 (2.4%); arrhythmias 53/24/23%, 1852 (1.9%); cerebro-vascular disease 44/33/23%, 1255 (1.5%); cancer, in remission 69/25/7%, 2378 (0.6%); cancer, stable, but still under treatment 36/32/3%, 681 (3.6%); history of bone marrow transplantation 13/67/30%, 139 (0.9%); history of a solid organ transplantation 15/55/30%, 181 (2.4%); infected with human immunodeficiency virus, but not yet AIDS 25/47/28%, 401 (1.3%); AIDS 12/40/48%, 174 (5.3%); autoimmune disease in stable stage 62/26/12%, 2306 (1.9%).

Conclusion: AIT should probably not be contraindicated in patients with hypertension, cancer, in remission, a history of bone marrow transplantation and HIV infected.

Results: 1061 of the 5148 (20.6%) surveys were sent back. 86% is US-based, 14% foreign.

Practice setting:
- 44% Urban
- 51% Suburban
- 5% Rural.

Academic:
- 31% Yes
- 69% No

Experience:
- 21% ≤ 5 years
- 11% 11-15 years
- 14% 16-10 years
- 54% more than 16 years

Practice size:
- 30.3% small practice
- 42.4% midsize
- 27.4% large practice

Figure 1 depicts specific medical conditions on the x-axis and the percentages of respondents who have treated/would treat/contraindicates AIT in patients with this kind of condition. Figure 2 shows the number of patients with a certain underlying disorder actually treated with AIT.

Background: Little data exists on Allergen Immunotherapy (AIT) in patients with specific medical conditions. Statements 21, 43 and 44 of the Practice Parameters on Immunotherapy 3rd update are on this subject. We quote:

- Immunotherapy can be considered in patients with immunodeficiency and autoimmune disorders.
- References: one review on allergy in HIV-positive patients.
- Allergen immunotherapy should not be initiated in patients with poorly controlled asthma symptoms.
- Level of evidence C; References: 3 AIT mortality surveys.
- Medical conditions that reduce the patient’s ability to survive the systemic allergic reaction or the resultant treatment are relative contraindications (e.g. significant cardiovascular disease).
- Level of evidence C; no references.

In this context the experience of practicing allergists might yield very useful information.

Methods: A survey (SurveyMonkey*) was sent out to all AAAAI members to explore their experience with AIT in patients with specific medical conditions. The survey consisted of two parts: (1) established the number of AAAAI responders reporting administration of AIT to patients with a certain medical condition. The second part collected some more details; this part was optional.

Definitions: Major problems with AIT = activation of underlying disease, systemic reactions, or discontinuation of AIT for medical reasons. Minor problems with AIT = dose reduction or postponed dose and AIT continuation. Results are expressed descriptively.

Cont. Results: Fig 3 shows the experience of those respondents who have administered AIT to patients with certain medical conditions: the number of physicians that has encountered major problems is very limited for most conditions. None of the US respondents reported any major problems with AIT in patients with a history of cancer, bone marrow or solid organ transplantation or in patients with cerebro-vascular disease.

Table 1 shows the type of cancer as stated by the allergists: e.g. 316 physicians noted they had administered AIT to patients with a history of breast cancer, 102 had administered AIT to patients with breast cancer, stable but still under treatment, etc.

Table 1

<table>
<thead>
<tr>
<th>Malignancy</th>
<th>History of cancer</th>
<th>Cancer, stable, under treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast cancer</td>
<td>316</td>
<td>102</td>
</tr>
<tr>
<td>Prostate</td>
<td>135</td>
<td>36</td>
</tr>
<tr>
<td>Colon</td>
<td>77</td>
<td>19</td>
</tr>
<tr>
<td>Lymphoma/NHL</td>
<td>70</td>
<td>18</td>
</tr>
<tr>
<td>Skin*</td>
<td>60</td>
<td>9</td>
</tr>
<tr>
<td>Leukemia</td>
<td>48</td>
<td>13</td>
</tr>
<tr>
<td>Lung</td>
<td>33</td>
<td>15</td>
</tr>
<tr>
<td>Melanoma</td>
<td>23</td>
<td>11</td>
</tr>
<tr>
<td>Thyroid</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td>Ovarian</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>Renal/ Kidney</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>Many types of Ca*</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

* Not Melanoma. ** Several mentioned: excluding hematological. Other malignancies mentioned: uterus, brain, cervical, solid tumors, testicular, CLL, GI tract, multiple myeloma, sarcoma, bladder, liver, prostate, parotid, astrocytoma

Conclusion: Based upon these results, practice patterns suggest use of AIT in these conditions and a need for prospective re-evaluation of these conditions as contraindications for AIT. This holds especially true for hypertension, cancer in remission, a history of bone marrow or solid organ transplantation and HIV positive persons. We confirm AIT in patients with severe asthma is prone to cause problems.

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