CHALLENGES IN THE IMPLEMENTATION OF THE EAACI AIT GUIDELINES

A SITUATIONAL ANALYSIS OF CURRENT PROVISION OF ALLERGEN IMMUNOTHERAPY

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NARRATIVE SUMMARY OF FINDINGS FROM THE QUESTIONNAIRE

Table S1  Recommendations to improve uptake of AIT in primary care (thematic analysis combined between two surveys)

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Explanatory statements quoted from the survey</th>
</tr>
</thead>
</table>
| Strengthen awareness through educational training and practice opportunities | • The use of immunotherapy in primary care is very much depending on the training and knowledge of primary care doctors - at the moment in [country], it is not suitable due to lack of training and knowledge.  
• Reading the guidelines of allergy immunotherapy and use of them in primary care after taking a rapid training course.  
• Involvement at teaching university and government- ministerial levels in advancing the specialty, especially since there is evidence that this kind of therapy is very much needed in the region |
| Reimbursement policies and more time                     | • GP’s have no time to do it.  
• Due to high workload pressures in primary care the initial goal would need to be to increase workforce in general!  
• Reimbursement policies.                                                                                                                                            |
| Resolving legal issues                                   | • Not now, we are struggling with health insurance funds to allow GP to diagnose and treat allergic diseases (asthma and allergic rhinitis).  
• Legally issues about access to therapy for GPs remain unsolved.  
• In our country AIT is not used, ie.not applied at the level of primary care (AIT can be introduced and performed only by doctors with subspecialty in Allergology and Immunology at secondary and tertiary level). |
| Improved collaboration between primary and specialist care| • Support from secondary care.  
• Referral links to consultants.  
• Acknowledgement of and appreciation for primary care physicians’ input and initial management of patients.                                                                                           |
| Availability of national guidelines                       | • National guidelines on management algorithms for persons with allergies.  
• Electronic database of patients that could benefit from it and of doctors that could apply it.                                                                                                           |
| Strengthened evidence base                                | • Research to demonstrate benefit and cost-effectiveness.  
• More evidence on efficacy and education around case selection.                                                                                                         |

LITERATURE SEARCH STRATEGY

(DP and ER) searched Pubmed using the following terms:
using the terms allergy AND primary care AND immunotherapy
("hypersensitivity"[MeSH Terms] OR "hypersensitivity"[All Fields] OR "allergy"[All Fields] OR "allergy and immunology"[MeSH Terms] OR "allergy and immunology"[All Fields]) AND ("primary health care"[MeSH Terms] OR "primary"[All Fields] AND "health"[All Fields] AND "care"[All Fields]) OR "primary health care"[All Fields] OR ("primary"[All Fields] AND "care"[All Fields]) OR "primary care"[All Fields]) AND ("immunotherapy"[MeSH Terms] OR "immunotherapy"[All Fields]). It was limited to year 2000-2016 and was run in September 2016.

This yielded 20 papers
10 were excluded as they were surveys of a secondary care population, Randomised clinical trials, estimates of cost effectiveness or guidelines.

Of the remaining 10 papers, one was a duplicate and was excluded leaving 9 papers for evaluation.

The search was supplemented by the library of the Royal College of GPs

Run by discovery process with access to following databases to cover last ten years

Search words Allergy, Immunotherapy, primary care

The complete list of additional journals to the Medline database is below:

- BMJ: British Medical Journal - General Practice Edition
- Education for Primary Care
- European Journal of General Practice
- Evidence-Based Medicine
- Family Practice
- Health Service Journal
- Journal of Evaluation in Clinical Practice
- Journal of Family Practice
- Journal of Medical Biography
- Journal of Public Health
- Lancet - International edition
- Medical Care
- Medical Education
- New England Journal of Medicine - International Ed
- Primary Health Care Research and Development
- Pulse - England
- Quality in Primary Care

This yielded a total of 39 papers. There were eight duplicates, leaving 31 abstracts. Of these 30 were rejected although one did report a negative trial of immunotherapy in primary care (de Bot CM; Moed H; Berger MY; Röder E; Hop WC; de Groot H; de Jongste JC; van Wijk RG; Bindels PJ; van der Wouden JC, Pediatric Allergy And Immunology: 2012 Mar; Vol. 23 (2), pp. 150-8) thought to be due to an inadequate dose of the allergen.

Two further papers were identified: Variation in examination and treatment offers to patients with allergic diseases in general practice and Prevalence and treatment profile of patients with grass pollen and house dust mite allergy.

Included papers

Excluded papers


ONLINE QUESTIONNAIRES FOR STAKEHOLDERS AND GENERAL PRACTITIONERS

Questions for Allergy Immunotherapy: Stakeholders

1. What country are you representing?
   Please comment below
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________

2. Are you representing a patient group, allergy charity or a specialist society?
   Please comment below
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________

3. Is allergy immunotherapy available in your country?
   (1) ☐ Yes
   (2) ☐ No
   (3) ☐ Don’t know
   Comments
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________

4. Which allergy immunotherapy is available in your country?
   (1) ☐ Venom
   (2) ☐ Tree
   (3) ☐ Grass
   (4) ☐ Mould
   (5) ☐ Cat
   (6) ☐ Dog
   (7) ☐ HDM
   (8) ☐ Don’t know
   Comments
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________

5. Does your country have a national policy on allergy immunotherapy?
   (1) ☐ Yes
   (2) ☐ No
   (3) ☐ Don’t know
   Comments
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________

6. Does your country have national allergy immunotherapy guidelines?
   (1) ☐ Yes
   (2) ☐ No
   (3) ☐ Don’t Know
   Comments
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________
7. Which national guidelines on allergy immunotherapy exist?
Please tick off all that apply
(1) ☐ Advice on immunotherapy on venom
(2) ☐ Advice on immunotherapy on asthma
(3) ☐ Advice on immunotherapy on rhinitis
(4) ☐ Advice for specialists
(5) ☐ Advice for primary care physicians
(6) ☐ Don’t know
Comments

8. Are there agreed pathways for allergy patient care?
Please tick off all that apply
(1) ☐ Shared care
(2) ☐ Referral criteria
(3) ☐ Follow up and monitoring
(4) ☐ Agreement between health care professionals
(5) ☐ Don’t know
Comments

9. If there is a pathway is there training on allergy immunotherapy for specialists and for primary care?
(1) ☐ Yes
(2) ☐ No
(3) ☐ Not applicable
Comments

10. Are the following allergy tests available to confirm diagnosis?

<table>
<thead>
<tr>
<th>Test</th>
<th>Available to</th>
<th>Available to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific IgE tests available to primary care?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Specific IgE tests available to specialists?</td>
<td>(1) ☐</td>
<td>(2) ☐</td>
</tr>
<tr>
<td>Skin Prick tests available to primary care?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Skin Prick tests available to specialists?</td>
<td>(1) ☐</td>
<td>(2) ☐</td>
</tr>
</tbody>
</table>

Comments

11. In which clinical location is the subcutaneous allergy immunotherapy given?

<table>
<thead>
<tr>
<th>Location</th>
<th>Available to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialist</td>
<td>Yes</td>
</tr>
<tr>
<td>Primary care</td>
<td>(1) ☐</td>
</tr>
<tr>
<td>Shared care</td>
<td>Yes</td>
</tr>
<tr>
<td>Don’t know</td>
<td>(1) ☐</td>
</tr>
</tbody>
</table>

Comments

12. Who normally makes the decision to discontinue the treatment of allergy immunotherapy?

<table>
<thead>
<tr>
<th>Person</th>
<th>Available to</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP</td>
<td>(1) ☐</td>
</tr>
<tr>
<td>Specialist</td>
<td>Yes</td>
</tr>
<tr>
<td>Patient</td>
<td>(1) ☐</td>
</tr>
<tr>
<td>Don’t know</td>
<td>(1) ☐</td>
</tr>
</tbody>
</table>

Comments
13. Is there reimbursement for the allergy immunotherapy treatment product?
(1) □ Yes
(2) □ No
(3) □ Don’t know
Comments

13a. What type of reimbursement?
(1) □ Full funding
(2) □ Partial funding
Comments

13b. Who reimburses the allergy immunotherapy treatment product?
Please tick off all that apply
(1) □ The state
(2) □ The insurance
(3) □ Private
(4) □ Co pay mixed private/state
(5) □ Not relevante
(6) □ Don’t know
Comments

14. Is there reimbursement for the administration?
(1) □ Yes
(2) □ No
(3) □ Don’t know
Comments

14a. Who reimburses the administration?
Please tick off all that apply
(1) □ The state
(2) □ The insurance
(3) □ Private
(4) □ Co pay mixed private/state
(5) □ Don’t know
(6) □ Not relevante
Comments

15. Do you consider any of the following barriers to allergy immunotherapy?
Please tick off all that apply
(1) □ Fees for time
(2) □ Reimbursement barriers to patients travel costs
(3) □ Time off work for patients
(4) □ Accessibility
(5) □ Beliefs about efficacy
(6) □ Beliefs about safety
(7) □ Costs to patients travel time and time off work etc.
(8) □ Don’t know
Comments
Current Provision of Allergen Immunotherapy

Questions for Allergy Immunotherapy: General Practitioners

16. Is accreditation required to administer immunotherapy?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialist</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Primary care</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Comments

17. On a scale of 0-10 how aware of allergy immunotherapy do you think the different categories are?

From 0 (not aware) to 10 (completely aware)

The general public

18. Do you have any thoughts on what may help support the use of allergy immunotherapy in primary care?

Thank you for your valuable time which will inform the construction of the European Academy of Allergy and Clinical Immunology (EAACI) AIT guidelines and make them more relevant to your needs.
6. Do you think GPs would ever consider recommending allergy immunotherapy for treatment of? Please tick one box on each line

<table>
<thead>
<tr>
<th>Condition</th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergic rhinitis</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Allergic asthma</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Venom allergy</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Comments


7. Do you think GPs would consider performing immunotherapy themselves or refer in the following cases?

Please tick off all that apply

<table>
<thead>
<tr>
<th>Condition</th>
<th>GPs would do the immunotherapy themselves</th>
<th>GPs would refer</th>
<th>Not available</th>
<th>It depends on reimbursement</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergic rhinitis</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Allergic asthma</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Venom allergy</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
</tbody>
</table>

Comments


8. With regards to allergy immunotherapy is there the possibility of collaboration (shared care) with an allergy specialist?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
</tbody>
</table>
8a. What form of collaboration do GPs have with the specialist? Please tick off all that apply

(1) ☐ Referral
(2) ☐ Advice and guidance
(3) ☐ Shared care
(4) ☐ Confirm diagnosis
(5) ☐ Patient selection
(6) ☐ Not relevant

Comments
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________________________________________
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10. Is formal training on allergy immunotherapy available?

(1) ☐ Yes
(2) ☐ No
(3) ☐ Don’t know

Comments
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9. Which of the following do you think GPs consider as barriers to primary care working with allergy immunotherapy? Please tick off all that apply

(1) ☐ Lack of knowledge
(2) ☐ Lack of infrastructure/equipment
(3) ☐ Communication with specialists
(4) ☐ Reimbursement policies
(5) ☐ Time pressures
(6) ☐ Uncertainty about efficacy
(7) ☐ Not available on the market
(8) ☐ None of the above

Comments
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________________________________________
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11. Is allergy immunotherapy normally part of formal GP training?

(1) ☐ Yes
(2) ☐ No
(4) ☐ Don’t know

Comments
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12. Do you have any thoughts on what may help support the use of allergy immunotherapy in primary care?

________________________________________
________________________________________
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________________________________________

Thank you for your valuable time which will inform the construction of the European Academy of Allergy and Clinical Immunology (EAACI) AIT guidelines and make them more relevant to your needs.