What is allergic rhinitis (AR)?

Allergic rhinitis (AR) is an inflammatory disorder of the lining inside the nose caused by an allergic reaction to pollen, dust mites, mould, or dander from certain animals. AR has a significant negative impact on a patients’ quality of life and carries high socio-economic burden. AR affects up to 30% of the European population, including children, adolescents and adults; and can be associated with increased risk of asthma.

What should the physician do?

- Ask about allergic symptoms and the medical history of your patient
- Determine the severity of the disease and impact of the major symptom
- Perform physical examination, including anterior rhinoscopy
- Confirm allergy by skin prick test or serum specific IgE
- Check for lower airway symptoms, especially asthma

When to suspect comorbid asthma?

Questions to your patient

- Have you had an episode or recurrent episodes of wheezing?
- Do you have troublesome cough, especially at night/during awakening/exercise?
- Do you cough or wheeze after exercise?
- Do you experience extended common cold/laryngitis/bronchitis?
- Does your chest feel tight or do you feel impaired breathing out?

If YES to any of these question: your patient might be asthmatic.

Symptoms suggestive for AR (when related to allergen exposure)

- Runny nose
- Sneezing, especially paroxysmal
- Nasal obstruction
- Nasal itch
- Ocular symptoms like itch, redness or tearing

Symptoms LESS suggestive for AR

- Unilateral symptoms
- Discoloured secretions
- Facial or nasal pain
- Recurrent epistaxis
- Smell disorder (anosmia)
- Posterior rhinorrhea (post nasal drip) with thickened mucus
- Isolated rhinorrhea

How to apply the visual analogue scale (VAS)?

Ask your patient to mark on the horizontal line of 10 cm how bothersome his/her symptoms are. The ends of the horizontal line are defined as the extreme limits of the burden of disease. VAS has been validated for use on smartphones.

How to use the AR pocket guide in 5 steps

1. Diagnose AR
   • History
   • Symptom(s)
   • Confirm sensitization

2. Classify patient
   • Symptom(s)
   • Treatment response

3. Define therapy
   • Medical treatment
   • Patient education
   • Patient partnership

4. Select product
   • Pharmacotherapy
   • Allergen Immunotherapy

5. Activate treatment plan

2'. Reclassify patient

3'. Redefine therapy

4'. Select product

5'. Finetune treatment plan

Personalized treatment based on:
• treatment response
• long-term plan
• patient needs

6. Patient follow up

Controlled AR (VAS < 5)

Uncontrolled AR (VAS ≥ 5)
Allergic rhinitis clinical presentation

Two or more nasal symptoms suggestive of allergic rhinitis

- Difficult-to-treat AR
- Failure of previous treatment (step 1)

- Severe AR defined by uncontrolled symptoms despite previous treatment and after confirmation of diagnosis, medication adherence, co-morbidities managed
- Failure of previous treatment (step 2)

AR patient aiming for sustained effects

FIRST LINE CARE
Pharmacist – General Practitioner

SPECIALIST CARE
Specialist

Patient education on disease and therapy adherence

Avoid irritants and allergens | Advise saline nasal sprays/douching

Fixed nasal corticosteroid + nasal anti-H1 (*)

- Nasal corticosteroid
- Combination nasal corticosteroid + oral anti-H1

VAS ≥ 5
Uncontrolled

Confirm diagnosis
Check medication adherence
Evaluate co-morbidities

Re-evaluate diagnosis

Fixed nasal corticosteroid + nasal anti-H1 (*)

Allergen Immunotherapy (moderate-severe AR)

and/or

Oral corticosteroid (short course)

and/or

Surgery (severe nasal obstruction)

and/or

Add-on therapies (*)

VAS ≥ 5
Uncontrolled

(*) Add-on therapies
- Isolated watery rhinorrhea: Ipratropium
- Rhinorrhea in asthmatics: Leukotriene receptor antagonist
- Ocular itch/skin rash: Oral non-sedating anti-H1
- Ocular symptoms: Intra-ocular anti-H1 or Cromones
- Sudden onset nasal blockage: nasal / oral decongestant ≤ 7 days

Allergen Immunotherapy (AR due to i.e. pollen or house dust mite)

(※) Depending on availability at national level
WHY choose allergen immunotherapy (AIT)?

Allergic rhinitis (AR) affects up to 30% of the European population, including children and adults. Despite guidelines on the correct use of effective treatment, up to 40% of AR patients remain uncontrolled. AIT has been shown to improve the level of control with up to 84% of patients being controlled by AIT. AIT is only indicated for allergic rhinitis/rhinoconjunctivitis/allergic asthma, not for other forms of rhinitis.

HOW to choose allergen immunotherapy?

1. The product for AIT should be available by national marketing authorization (registration)
2. Check national or international AIT guidelines to select evidence based products
3. If several products are available prefer products that are documented in controlled clinical trials
4. Use of non-documented products (Named Patient Products) only if no alternative is available and based on the physician’s liability and indication

What is AIT?

AIT (also called desensitization, hyposensitization or allergy vaccination) is a treatment with administration of increasing amounts of an allergen to induce immunological tolerance and to prevent allergic symptoms upon re-exposure. AIT can be administered via different routes: subcutaneous immunotherapy (SCIT), with s.c. injections of the sensitizing allergens in the upper arm, and sublingual immunotherapy (SLIT), with the sensitizing allergen kept under the tongue for 1-2 min (in the form of tablets or drops).

What are the advantages of AIT?

Efficacy varies between specific products

- Only treatment with disease modifying capacity
- Reduces nasal and/or ocular symptoms
- Enhances the quality of life
- Lowers need for intake of other anti-allergic medication
- Induces immunological tolerance, providing sustained clinical benefit
- Has the potential to prevent asthma

Which patients can benefit from AIT?

AIT should be considered if ALL are present:

- Uncontrolled moderate-to-severe symptoms of AR +/- conjunctivitis, on exposure to clinically relevant allergens
- Confirmation of IgE sensitisation to clinically relevant allergens (via skin prick test or serum specific IgE)
- Inadequate control of symptoms despite reliever medication and allergen avoidance measures and/or unacceptable adverse effects of medication

<table>
<thead>
<tr>
<th></th>
<th>SCIT</th>
<th>SLIT</th>
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<tbody>
<tr>
<td><strong>Safety</strong></td>
<td>A safe and well-tolerated treatment when injections are given in a medical setting by experienced personnel trained in the handling of adverse events.</td>
<td>A safe and well-tolerated treatment. Need for observation in the clinic after first dose followed by at home treatment.</td>
</tr>
<tr>
<td><strong>Adverse effects</strong></td>
<td>Risk of moderate to severe systemic reactions: 1 reaction per 2000 individual injections. Frequent minor, local adverse effects.</td>
<td>Risk of moderate to severe systemic reactions: &lt; 1 reaction per 500 patients during the 3-year treatment period. Frequent minor, local adverse effects.</td>
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<tr>
<td><strong>Duration</strong></td>
<td>Three years continuous SCIT is effective for sustained effect of grass pollen-driven AR. During this period patients might need reliever medication according to AR pocket guide.</td>
<td>Two (drops) or three (tablets) years continuous SLIT is effective sustained effect of grass / tree pollen and HDM. During this period patients might need reliever medication according to AR pocket guide.</td>
</tr>
<tr>
<td><strong>Administration</strong></td>
<td>Subcutaneous injections (usually monthly on maintenance, more often during updosing) in a medical setting.</td>
<td>At home administration after first dose under medical supervision.</td>
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<tr>
<td><strong>Effectiveness</strong></td>
<td>Pre, pre/coseasonal and continuous SCIT are effective in short-term seasonal and perennial AR.</td>
<td>Pre, pre/coseasonal and continuous SLIT tablet or drops are effective in short-term seasonal AR and continuous SLIT tablets in short-term for perennial AR.</td>
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**Absolute contra-indications for AIT**

Always adhere to product-specific SmPC

- Uncontrolled or severe asthma
- Active, systemic auto-immune disorders, or other severe disease
- Active malignant neoplasia
- Initiation of AIT during pregnancy
- Under the age of 5

For relative contra-indications: contact specialist.

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(*) Always adhere to product-specific SmPC

Vision

EUFOREA is an international non-profit organisation forming an alliance of all stakeholders working towards prevention and reduction of burden of chronic respiratory diseases

Mission

EUFOREA proposes to reduce the preventable and avoidable burden of morbidity due to chronic respiratory diseases through innovation and digital solutions