Clinical Practice Guideline: Allergic Rhinitis

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Learner Objectives

• After this presentation you should:
  – 1) know ideal management for AR patients
  – 2) be able to optimize combination therapies
  – 3) know when to consider surgical options

Guideline

  – Apply to adults and children >2 years old
  – Designed to assist clinicians by providing evidence based framework for decision making strategies
Statement 1: Patient H & PE

• Clinicians should make the diagnosis of allergic rhinitis (AR) when patients present with history and physical examination consistent with an allergic cause and 1 or more of the following: nasal congestion, runny nose, itchy nose, or sneezing.

• Recommendation
  • Grade C
  • Purpose is to provide guidance for the initial clinical diagnosis of AR.

• Group recognized that conclusive diagnosis is difficult without diagnostic testing, but making presumptive diagnosis based on H&P alone reasonable.
• A good response to avoidance of suspected allergens or appropriate empiric therapy supports the diagnosis of AR and may preclude the need for further testing.
Statement 2: Allergy Testing

- Clinicians should perform and interpret, or refer to a clinician who can perform and interpret, specific IgE (skin or blood) allergy testing for patients with a clinical diagnosis of AR who do not respond to empiric treatment, or when the diagnosis is uncertain, or when knowledge of the specific causative allergen is needed to target therapy.

Statement 2: Allergy Testing

- Recommendation
- Grade B
- Purpose is to help clinicians decide when to use IgE-specific allergy testing to define the types of testing that may be useful

Statement 3: Imaging

- Clinicians should NOT routinely perform sinonasal imaging in patients presenting with symptoms consistent with a diagnosis of AR.
Statement 3: Imaging

- Recommendation against
- Grade C
- Purpose is to discourage the routine use of diagnostic imaging for patients with AR.
  - Diagnosis is based on clinical presentation.
  - Potential significant costs and side effects of imaging modalities outweigh their utility.

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Statement 4: Environmental Factors

- Clinicians may advise avoidance of known allergens or may advise environmental controls (removal of pets; use of air filtration system, bed covers, acaricides) in AR patients who have identified allergens that correlate with clinical symptoms.

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Statement 4: Environmental Factors

- Option
- Grade B
- Purpose is to reduce symptoms of AR and improve QOL through environmental controls that efficiently and effectively reduce allergen exposure while avoiding measures that are costly, impractical, and have not been shown to be beneficial.

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Statement 4: Environmental Factors

- Actively engaging patients in treatment strategies designed to reduce exposure to specific allergens and improve allergy symptoms.

<table>
<thead>
<tr>
<th>Environmental Control Measure</th>
<th>Evidence Support Reduction in Allergen Level</th>
<th>Evidence Support Reduction in Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal of pets</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Keeping pets area a week</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Using air filters in home</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Using air purifiers</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Combined use of control measures</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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Statement 5: Chronic Conditions and Comorbidities

- Clinicians should assess patients with a clinical diagnosis of AR for, and document in the medical record, the presence of associated conditions such as asthma, atopic dermatitis, sleep disordered breathing, conjunctivitis, rhinosinusitis, and otitis media.

Recommendation
- Grade B
- Purpose is to increase awareness of the medical conditions that are associated with AR and emphasize the importance of diagnosing and treating these comorbidities – Atopic disorders, sleep-disordered breathing, otitis media and rhinosinusitis

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Statement 6: Topical Steroids

- Clinicians should recommend intranasal steroids (INS) for patients with a clinical diagnosis of AR whose symptoms affect their quality of life.

Strong recommendation
- Grade A
- Purpose is to encourage clinicians to use INS for AR based on their efficacy, superiority over other therapies, and good safety record.

Statement 7: Oral Antihistamines

- Clinicians should recommend oral second generation/less sedating antihistamines for patients with AR and primary complaints of sneezing and itching.
Statement 7: Oral Antihistamines

- Strong recommendation
- Grade A
- Purpose is to define the role and encourage the use of oral antihistamines in the treatment of AR.

Statement 8: Intranasal Antihistamine

- Option
- Grade A
- Purpose is to address the use of intranasal antihistamines for patients with AR.
Statement 9: Oral Leukotriene Receptor Antagonist (LTRA)

- Clinicians should NOT offer LTRAs as primary therapy for patients with AR

Statement 9: Oral Leukotriene Receptor Antagonist (LTRA)

- Recommendation against
- Grade A
- Purpose is to reduce the use of a more expensive, less effective agent as first-line treatment of AR.

Statement 10: Combination Therapy

- Clinicians may offer combination pharmacologic therapy in patients with AR who have inadequate response to pharmacologic monotherapy.
Statement 10: Combination Therapy

- **Option**
- **Grade A**
- **Purpose** is to promote the use of effective and decrease the use of ineffective pharmacologic combinations for the treatment of AR.

**Statement 10: Combination Therapy**

- **INS and Oral Antihistamines**
  - Should **NOT** be routinely used
  - Studies demonstrate no benefit
- **Oral Antihistamines and Oral Decongestants**
  - Control AR symptoms better than either alone
  - Increased SE
    - Insomnia, headache, dry mouth, nervousness
  - Potential for tolerance of oral decongestant
  - Decongestant not recommended for age <4, extended release, 120mg, 12 hour dose not for age <12

**Statement 10: Combination Therapy**

- **Oral Antihistamine and Leukotriene Receptor Antagonist**
  - Conflicting evidence but use **NOT** recommended
  - Combination equivalent to oral antihistamine alone
  - Combination is inferior to or equivalent to monotherapy with INS in control of AR symptoms
- **INS and LTRA**
  - **NOT** recommended, no benefit to addition of LTRA
Statement 10: Combination Therapy

- INS and Intranasal Antihistamines
  - Recommended for use in patients who tolerate either alone with inadequate control of symptoms
  - More effective than either monotherapy for AR
  - Benefit across multiple symptoms of AR in patients with moderate to severe symptoms
- INS and Intranasal Oxymetazoline
  - Recommend short term use (<3 days) in cases of severe nasal congestion
  - Combination is more effective than either monotherapy
  - Rhinitis medicamentosa is a concern

Statement 11: Immunotherapy

- Clinicians should offer, or refer to clinician who can offer, immunotherapy (sublingual or subcutaneous) for patients with AR who have inadequate response to symptoms with pharmacologic therapy with or without environmental controls
Statement 11: Immunotherapy

• Recommendation
• Grade A
• Purpose is to increase awareness of IT as a treatment for AR, promote its appropriate use, and reduce unnecessary or harmful variations in care.

• Immunotherapy is the only proven treatment for AR
• Has the potential to change the natural history of AR
  – IT reduces AR symptoms and medication use
  – Improves control of asthma, conjunctivitis, and QOL
  – Prevents the development of asthma and new allergies
• Large role for patient preference as the therapy carries potentially serious risks, added cost, delayed onset of symptoms control, and duration of therapy is several years

• Offer to patients who:
  – Inadequate response to pharmacotherapy
  – Partial response to pharmacotherapy- added symptom control
• Considerations
  – Patient preference
  – Adherence to therapy
  – Response to avoidance measures
  – Coexisting allergic asthma
  – Long term cost savings
Statement 12: Inferior Turbinate Reduction

- Clinicians may offer, or refer to a surgeon who can offer, inferior turbinate reduction in patients with AR with nasal airway obstruction and enlarged turbinates who have failed medical management.

Statement 12: Inferior Turbinate Reduction

- Option
- Grade C
- Purpose is to increase awareness of and allow for appropriate use of inferior turbinate reduction surgery as part of the management of AR patients with persistent nasal symptoms and turbinate hypertrophy despite treatment.

Statement 13: Acupuncture

- Clinicians may offer acupuncture, or refer to a clinician who can offer acupuncture, for patients with AR who are interested in non-pharmacologic therapy.
Statement 13: Acupuncture

• Option
• Grade B
• Purpose is to enable patient access to potentially beneficial nontraditional treatment and increase awareness of the possible benefit of acupuncture in the treatment of patients with AR

Several large RCTs have found that acupuncture offers some symptom control and improved QOL in patients with perennial AR
  – No evidence of significant harms
• Acupuncture may be offered as an option in AR patients with an interest in non-pharmacologic approaches to management

Statement 14: Herbal Therapy

• No recommendation regarding the use of herbal therapy for patients with AR
• No recommendation
  – Evidence quality- uncertain
• Lack of English-language translation of majority of literature
• The diversity of and lack of standardization of herbal therapies
• And a poor understanding by the panel of risks and harms
Summary of Recommendations

Strong Recommendations. Grade A

- 6. Topical Steroids.
  - Recommend INS in AR patients
  - Recommend 2nd Gen antihistamines for AR

Recommendations. Grade B, C

- 1. Patient H and PE.
  - Diagnose AR when H &PE are consistent with AR
- 2. Allergy Testing
  - Test in AR patients that fail empiric therapy
- 5. Chronic conditions and comorbidities
  - Evaluate for potential comorbidities
- 11. Immunotherapy
  - Offer if inadequate response to medicines
Option

• 4. Environmental Factors
  • Avoidance of known triggers
• 8. Intranasal antihistamines
  • May offer patients with AR
• 10. Combination therapy
  • May offer if failed monotherapy
• 12. Inferior turbinate reduction
  • May offer if failed medical therapy
• 13. Acupuncture
  • May offer

Recommendation Against

• 3. Imaging
  • No routine imaging for AR
• 9. Oral leukotriene receptor antagonists
  • LTRA should not be first line therapy for AR
• 14. Herbal therapy – NO recommendation
  • Lack data

Questions?