Allergic Rhinitis

Common condition with increasing prevalence
Affects 10-40% of the population

Significant reduction in quality of life
Decreased work & school attendance of 3 – 4%
Reduced work & school efficiency of 30 – 40 %
Core symptoms

- Running nose
- Itchy nose
- Sneezing
- Postnasal drip

Mannerisms

- Allergic salute
- Rabbit face
- Noises
- Tongue thrusting
Core symptoms

- Running nose
- Itchy nose
- Sneezing
- Nasal obstruction
- Postnasal drip

Commonest problem

- Nasal congestion
- Affects sleep

Effects sleep

<table>
<thead>
<tr>
<th>Effect</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Every night</td>
<td>37.2%</td>
</tr>
<tr>
<td>Feel miserable</td>
<td>85.2%</td>
</tr>
</tbody>
</table>

76.6% every night

Allergic Rhinitis Care Programme in South Africa
• Underestimated by patients and doctors
• Poor levels of satisfaction
• No single definition of disease control
Core symptoms

Nasal obstruction
Running nose
Itchy nose
Sneezing
Postnasal drip

Mannerisms

Mouth breathing
Allergic salute
Rabbit face
Noises
Tongue thrusting
Allergic Rhinitis

**Intermittent**
- \( \leq 4 \) days per week
- or \( \leq 4 \) weeks

**Persistent**
- \( > 4 \) days per week
- **and** \( > 4 \) weeks
Allergic Rhinitis

Mild
• Normal sleep and
• No impairment of daily activities, sport, leisure and
• Normal work and school and
• No troublesome symptoms

Moderate - Severe
One or more items:
• Abnormal sleep
• Impairment of daily activities, sport, leisure
• Abnormal work and school
• Troublesome symptoms
Allergic Rhinitis

Intermittent
• ≤ 4 days per week
• or ≤ 4 weeks

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Allergic Rhinitis

**Persistent**
- > 4 days per week
- **and** > 4 weeks

**Mild**
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- Normal work and school **and**
- No troublesome symptoms

**Moderate - Severe**
One or more items:
- Abnormal sleep
- Impairment of daily activities, sport, leisure
- Abnormal work and school
- Troublesome symptoms
Management of allergic rhinitis

- Environmental Control Measures
- Education
- Pharmacotherapy
- Allergen Immunotherapy
Environmental control

• All patients should have sensitisations tested
• Avoidance alone will not be successful
• Avoidance is challenging!
• Select patients for avoidance on basis of disease severity and sensitisation patterns
Allergy testing
Education

• Patient expectations important
  – Effects symptom reporting
  – Effects adherence to treatment
  – … need to teach patients to recognise symptoms

• Pathophysiology important to foster adherence

• Technique
Technique is critical
Step-wise therapy of rhinitis

Step 1
Oral/nasal antihistamines or nasal cromones

Step 2
Nasal steroids in recommended dose

Step 3
Consider immunotherapy
mild intermittent

moderate severe intermittent

mild persistent

moderate severe persistent

Avoidance of allergens, irritant and pollutants

Intranasal decongestant (<10 days) or oral decongestant

Oral or local nonsedative H1-blocker

Leukotriene receptor antagonists

Intranasal steroid

Immunotherapy

Pharmacotherapy

- Intranasal corticosteroids
- Antihistamines
- Cromones
- Anticholinergics
- Decongestants
- Leukotriene antagonists
- Saline irrigation
- Do NOT use systemic esp depot steroids
<table>
<thead>
<tr>
<th></th>
<th>Blockage</th>
<th>Running</th>
<th>Sneezing</th>
<th>Itching</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intranasal Corticosteroids</strong></td>
<td>+++</td>
<td>+++</td>
<td>++</td>
<td>+</td>
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<tr>
<td><strong>Antihistamines</strong></td>
<td>+</td>
<td>+++</td>
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<tr>
<td><strong>Intranasal cromones</strong></td>
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</tr>
<tr>
<td><strong>Intranasal decongestants</strong></td>
<td>++++</td>
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Intranasal corticosteroids

- Most effective therapy
- Effective against all symptoms
- Low adverse effects
- Impact on ocular symptoms
- Most cost effective
- First line therapy for moderate-severe or persistent symptoms
- Regular “controller” therapy
Antihistamines

- Antihistamines relieve sneezing, itching and rhinorrhoea
- Older antihistamines have sedative and anticholinergic side effects
- Treatment with older antihistamines worsens educational outcomes!
- Most new antihistamines are equally effective in practice
- Best for intermittent rhinitis / acute symptoms
Others: Burst of therapy for a “flare”

- Nasal irrigation
  - Simple and inexpensive
  - Improves symptoms, QOL and reduces medication

- Intranasal decongestants
  - Very effective for obstruction
  - Use in older schoolgoing kids and adults
  - Oral decongestants have additional side effects

- Other intranasal steroid formulations: drops
Immunotherapy

- Reduces symptoms
- Reduces medication use
- Only disease modifying therapy
  - Alters course of disease
  - Prevents new sensitisations
  - Reduces development of asthma
Immunotherapy

- Indicated in subgroup of patients
  - Moderate – severe persistent AR
  - Proven IgE mediated allergy
  - To single allergen
  - Incompletely controlled with pharmacotherapy
  - Do not wish long term therapy
  - Side effects from pharmacotherapy
  - Who are capable of adherence
Rhinitis-asthma link

- Rhinitis can exacerbate asthma
- Rhinitis can cause bronchial hypersensitivity
- Histamine challenge +ve in rhinitis without asthma
- Most asthma exacerbations start in the upper respiratory tract
- Treatment of rhinitis can improve asthma symptoms