Rhinitis Guidelines

Classification and Differential Diagnosis

1. Rhinitis is defined as having two of the listed symptoms for ≥1 hour/day for ≥2 weeks
   a. blockage
   b. running (including postnasal drip)
   c. sneezing (including nasal itch)

2. Classification of rhinitis

<table>
<thead>
<tr>
<th>Allergic</th>
<th>Infective</th>
<th>Other</th>
<th>As part of systemic disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Seasonal</td>
<td>• Acute</td>
<td>• Idiopathic</td>
<td>• Primary defect in mucus</td>
</tr>
<tr>
<td>• Perennial</td>
<td>• Chronic</td>
<td>• NARES (non-allergic rhinitis with eosinophilia)</td>
<td>• cystic fibrosis</td>
</tr>
<tr>
<td>• Occupational</td>
<td></td>
<td>• Drug induced:</td>
<td>• Young's syndrome</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• beta-blockers</td>
<td>• Primary ciliary dyskinesia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• oral contraceptives</td>
<td>(Cartagener’s syndrome)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• aspirin</td>
<td>• Immunological</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• NSAIDS</td>
<td>• systemic lupus erythematosus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• local decongestants</td>
<td>• rheumatoid arthritis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Autonomic (responds to anticholinergics)</td>
<td>• AIDS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Atrophic</td>
<td>• Antibody deficiency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Neoplastic</td>
<td>• Granulomatous disease</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Wegener’s</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• sarcoidosis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Hormonal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• hypothyroidism</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• pregnancy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• “old man’s drip”</td>
</tr>
</tbody>
</table>

Severity

<table>
<thead>
<tr>
<th>Mild</th>
<th>Moderate-Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>• normal sleep and</td>
<td>• abnormal sleep or</td>
</tr>
<tr>
<td>• no impairment of daily activities, sport, leisure and</td>
<td>• impairment of daily activities, sport, leisure or</td>
</tr>
<tr>
<td>• no impairment of work and school and</td>
<td>• impaired work and school or</td>
</tr>
<tr>
<td>• no troublesome symptoms</td>
<td>• troublesome symptoms</td>
</tr>
</tbody>
</table>

Nasal problems are often multi-factorial and this needs to be taken into account when using the above classification or considering treatment.
Diagnosis

1. Take a history

2. Nasal examination
   a. external and internal appearance
   b. secretions (clear, discoloured or blood stained)
   c. airflow
   d. palpation

3. Consider:
   a. specific IgE
   b. other blood tests, e.g. FBC, thyroid function

Treatment (see Figure 1)

1. Education
   a. provide advice on allergen avoidance and drug therapy, including safety and side effects
   b. poor compliance or poor technique in the use of nasal sprays and drops will result in treatment failure, therefore appropriate training is imperative

2. Antihistamines (AH)
   a. available as oral (OAH) or intranasal (INAH) preparations
   b. first-line therapy for mild allergic rhinitis
   c. addition to intranasal steroids for moderate/severe allergic rhinitis uncontrolled on topical intranasal steroids (INS) alone
   d. OAH – effective predominantly on “wet” symptoms such as itch, sneeze and rhinorrhoea; regular therapy is more effective than ‘as-needed’ use. Hull and East Riding Joint Formulary: First line choice – Cetirizine; Second line choices – Loratadine or Fexofenadine
   e. INAH (Azelastine) – useful as rescue therapy due to fast onset of action within 15 minute

3. Topical intranasal corticosteroids (INS)
   a. first-line therapy for moderate to severe allergic rhinitis persistent symptoms. Hull and East Riding Joint Formulary: First line choice – Beclometasone nasal spray; Second line choices - Budesonide nasal spray or Mometasone nasal spray or Fluticasone nasal spray
   b. addition to OAH or INAH in uncontrolled mild allergic rhinitis
   c. topical steroid drops should be used initially in nasal polyposis and severe obstruction. These are for short term use only.
   d. systemic absorption negligible with Mometasone and Fluticasone, modest for the remainder and high for Betamethasone nasal drops and Fluticasone nasal drops which are for short term use only

4. Systemic corticosteroids:
a. rarely indicated in the management of rhinitis, except for
   i. severe nasal obstruction
   ii. short-term Prednisolone (0.5 mg/kg for 5 to 10 days) rescue medication for
      uncontrolled symptoms on conventional pharmacotherapy
   iii. important social or work-related events, e.g. examinations, weddings
b. oral corticosteroids should be used briefly and always in combination with a topical
   nasal corticosteroid
c. Injectable corticosteroids are not recommended as the risk-benefit profile is poor

5. Anti-leukotrienes (LTRA)
a. Montelukast is licensed in the UK for those with seasonal allergic rhinitis who also
   have concomitant asthma since the age of 6 months

6. Topical anti-cholinergic (e.g. Ipratropium bromide)
a. watery rhinorrhoea in allergic rhinitis despite compliance with INS or INS with OAH
   or INAH
b. autonomic rhinitis when the dominant symptom is profuse watery rhinorrhoea in
   response to irritant triggers or changes in temperature

7. Chromones (e.g. Sodium cromoglicate)
a. children and adults with mild symptoms only and sporadic problems in season or on
   limited allergen exposure
b. Cromoglicate and Nedocromil eye drops are useful in allergic conjunctivitis as
   topical therapy

8. Allergen immunotherapy (desensitisation)
a. for pollen-allergic patients who fail to respond sufficiently to maximum conventional
   treatment (combination of INS and OAH or INAH)

NB. Treatment failure should always provoke a review of compliance.

Rhinitis in pregnancy and during breastfeeding

- rhinitis affects at least 20% of pregnancies and can start during any gestational week
- regular nasal douching may be helpful
- most medications cross the placenta and should only be prescribed when the apparent
  benefit is greater than the risk to the foetus
- it is a good practice to start treatment with ‘tried and tested’ drugs
  - intranasal Bclomethasone, Fluticasone and Budesonide appear to have good safety
    records as they are widely used in pregnant asthmatic women
  - intranasal and ocular Cromoglicate may be helpful
  - oral Chlorphenamine, Loratidine or Cetirizine may be added cautiously if additional
    treatment is needed but decongestants should be avoided
Referral (see Figure 1)

1. ENT referral
   a. unilateral nasal problems
   b. nasal perforations, ulceration or collapse
   c. blood-stained discharge
   d. crusting high in the nasal cavity
   e. periorbital cellulitis (refer urgently)

2. Allergy referral
   a. inadequate control of symptoms
   b. allergen/trigger identification
   c. to consider desensitisation
   d. recurrent nasal polyps
   e. recurrent infective rhinitis and sinusitis requiring antibiotics to exclude allergy or immunodeficiency
   f. multisystem allergy (e.g. rhinitis with asthma, eczema or food allergy)
   g. occupational rhinitis

References

1. e-Guidelines: Rhinitis management guidelines (registration and log in required)
   https://www.guidelines.co.uk/bsaci/rhinitis


APPROVAL PROCESS

<table>
<thead>
<tr>
<th>Written by:</th>
<th>Mr Jassar, ENT Consultant, HEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation process:</td>
<td>Dr P Gordins, Consultant Immunologist; Dr B Fernandes, Consultant Allergist HEY</td>
</tr>
<tr>
<td>Approved by:</td>
<td>Medicines Management Interface Group (Dec 16)</td>
</tr>
<tr>
<td>Ratified by:</td>
<td>HERPC July 2017</td>
</tr>
<tr>
<td>Review date:</td>
<td>July 2020</td>
</tr>
</tbody>
</table>
Figure 1. Management of rhinitis

- **Avoid:**
  - sedating antihistamines
  - decongestants or INS with high systemic bioavailability e.g. Beclometasone, Dexamethasone

- **Rhinitis**
  - nasal congestion
  - rhinorrhoea
  - itching
  - sneezing

- **Asthma?**
  - Assess for asthma and investigate and treat accordingly

- **Thick and green secretions**
  - Nasal crusting, bleeding, nasal deformity

- **New polyps (glaucous, insensitive) or unilateral symptoms and signs**

- **History suggestive of allergy (itching, sneezing and conjunctivitis)**
  - + positive allergy tests (skin prick test or specific IgE)

- **No obvious cause**

- **ENT referral**

- **Infective rhinitis/sinusitis**

- **Orbital cellulitis**

- **Nasal douching +/- INS**
  - + antibiotics if severe pain/fever

- **Rx failure**
  - If chronic/recurrent consider allergy or immune deficiency

- **Mild Symptoms**
  - OAH or INAH

- **Moderate/Severe symptoms**
  - INS

- **Allergic Rhinitis**

- **Check use, concordance, dose**
  - Combination Rx with INS and INAH

- **Rx failure**
  - Check use, concordance, dose
  - Itch/sneeze/wet nasal itch, catarrh add/non-sedating nasal Rx or LTRA if asthmatic use

- **Rx failure**

- **Urgent ENT referral**

- **Refer to Allergy Clinic**