

Allergic Rhinitis

Allergic rhinitis (AR), or hay fever, is a very common problem in the Australian community, with a self-reported prevalence of ~15 per cent. It is a type 1, IgA-mediated hypersensitivity reaction related to inhaled aeroallergens. AR ranges in severity from trivial to severe, with some people experiencing a significant impact on quality of life. While most patients manage their symptoms with antihistamines and other OTC preparations, GPs play a vital role in managing more severe and/or resistant disease. Supervisors play an important role in educating registrars on this common problem.

TEACHING AND LEARNING AREAS



- Pathophysiology of allergic rhinitis, and the [‘united airway’ hypothesis](#)
- Common known allergens, including region-specific triggers
- Appropriate history-taking, including red flags for serious disease
- Appropriate examination, including use of a nasal speculum
- Classification of type and severity of allergic rhinitis
- Differential diagnoses, including systemic causes and medications
- Investigations, including [skin-prick testing](#), [serum specific IgE \(ssIgE\) levels \(formerly known as RAST\)](#)
- [Management options](#)
- Indications for referral and appropriate pathways – role of immunotherapy

PRE-SESSION ACTIVITIES

- Read the 2017 [ASCIA Allergic Rhinitis Clinical Update](#) article

TEACHING TIPS AND TRAPS



- Untreated AR increases the risk of incident asthma, and treatment of AR has been shown to improve asthma symptoms
- The terms ‘seasonal’ and ‘perennial’ AR are potentially misleading and should be replaced by ‘intermittent’ and ‘persistent’
- Enquire about FHx of atopic disease – AR, asthma and atopic dermatitis
- An occupational history is essential
- Look for the nasal crease and ‘allergic shiners’ on examination
- Allergic conjunctivitis is a common comorbidity with AR
- Rhinitis medicamentosa (rebound rhinitis) can occur after as few as five days use of intranasal decongestants
- A trial of intranasal corticosteroids for simple uncomplicated AR is reasonable prior to any further investigations
- It is essential to demonstrate correct technique of nasal sprays
- There is no role in ordering an IgE level in isolated AR
- Onset of rhinitis in later life makes a non-allergic cause more likely
- In general, grasses pollinate in late-spring to early summer, and trees pollinate in late-winter to early-spring
- Aeroallergen avoidance is [not well supported by evidence](#) and challenging to implement
- Saline rinses, intranasal antihistamines and leukotriene receptor antagonists are useful adjunctive therapies to intranasal corticosteroids
- Positive SPT or ssIgE test results do not automatically prove the allergen/s are causing the symptoms

RESOURCES



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| Read | <ul style="list-style-type: none"> • Therapeutic Guidelines chapter on Allergic Rhinitis • 2017 AFP article Clinical assessment, diagnosis and management of nasal obstruction • ACSIA Allergic Rhinitis Treatment Plan |
| Watch | <ul style="list-style-type: none"> • How to use a nasal spray correctly |
| Listen | <ul style="list-style-type: none"> • NPS Medicinewise podcast Antihistamines and allergy |

FOLLOW UP/ EXTENSION ACTIVITIES

- Registrar to undertake clinical reasoning challenge and discuss with supervisor

Allergic Rhinitis

Clinical Reasoning Challenge

Hayley, a 22-year-old university student, presents to you with 'troublesome' hay fever. She describes a few years of worsening nasal congestion and itch, rhinorrhoea, sneezing and itchy eyes. Her symptoms were initially intermittent but are now more persistent. She has used regular oral antihistamines over the past few months, but does not feel her symptoms are much better. She has no asthma, nor other significant medical problems, takes the oral contraceptive pill but no other medications, and is a non-smoker.

QUESTION 1. What are the **MOST IMPORTANT** key features on history to exclude potentially serious underlying pathology? Write in note form, up to five features.

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____

You commence Hayley on a course of intranasal corticosteroids. She returns 3 months later and says that her symptoms are much the same.

QUESTION 2. What are the **MOST LIKELY** factors underlying her lack of response to intranasal corticosteroids? Write in note form, up to five factors.

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____

QUESTION 3. What investigations (if any) would you order at this stage? List, in note form only, up to two **MOST IMPORTANT** investigations you would order.

- 1 _____
- 2 _____

QUESTION 4. What are the **MOST LIKELY** factors underlying her lack of response to intranasal corticosteroids? Write in note form, up to five factors.

- 1 _____
- 2 _____
- 3 _____
- 4 _____

Allergic Rhinitis

ANSWERS

QUESTION 1

What are the MOST IMPORTANT key features on history to exclude potentially serious underlying pathology? Write in note form, up to five features.

- Unilateral symptoms (discharge or obstruction)
- Discoloured nasal discharge
- Pain
- Bleeding
- Severe anosmia

QUESTION 2

What are the MOST LIKELY factors underlying her lack of response to intranasal corticosteroids? Write in note form, up to five factors.

- Poor technique
- Insufficient dose
- Poor compliance/infrequent use
- Resistant disease
- Misdiagnosis e.g. vasomotor rhinitis, sinus disease, medication side effect (OCP)

QUESTION 3

What investigations (if any) would you order at this stage? List, in note form only, up to two MOST IMPORTANT investigations you would order.

- Skin-prick testing
- RAST

QUESTION 4

What other pharmacological groups would you consider adding to Hayley's regimen at this point? List, in note form only, up to four pharmacological groups.

- Intranasal antihistamines
- Leukotriene receptor antagonists
- Oral decongestants
- Antimuscarinics e.g. ipratropium