

# Allergic Rhinitis

## BACKGROUND

- Allergic rhinitis affects up to 25% of children and often co-exists with asthma and eczema
- Significant effect on quality of life
- May be seasonal or persistent

## RISK FACTORS

- Family history of atopy
- High socioeconomic status
- Firstborn
- Birth during pollen season
- Maternal smoking in first year of life
- Exposure to indoor allergens e.g. dust mites
- Early introduction of foods or formula

## COMMON TRIGGERS

- Grass & tree pollen
- House dust mite
- Animal dander

## IMPORTANT DIFFERENTIALS

- Nasal polyps (cystic fibrosis)
- Nasal foreign body (e.g. crayon)
- Deviated nasal septum

## REFERENCES

- Lancet. *Allergic rhinitis*. 2011; 378: 2112-2122

## HISTORY

- Nasal itching & sneezing
- Nasal congestion
- Rhinorrhoea
- Cough
- Reduced sense of smell
- Triggers
- Atopy
  - ✓ Asthma
  - ✓ Eczema
  - ✓ Food allergy
- Family history

## EXAMINATION

- Nasal congestion and inflammation
- Allergic conjunctivitis
- Signs of atopy
  - ✓ Allergic salute
  - ✓ Mouth breathing

## INVESTIGATIONS

- Skin prick testing if specific allergen suspected
- Allergy testing if symptoms not controlled by routine treatment

## TREATMENT

- Allergen avoidance
- Antihistamine (cetirizine) for nasal itch and sneezing
- Intranasal corticosteroids are second line
- Trial of montelukast if concurrent asthma
- Immunotherapy only if very severe and protracted

## TAKE HOME MESSAGES

- Allergic rhinitis is very common
- Try allergen avoidance and antihistamines to start
- If severe, ENT referral is warranted (few require surgery)

## REFERRAL

- Diagnostic uncertainty & need for specialist investigations or care
- Unresponsive to conventional treatment
- Nasal deformity/septal deviation

## ANTIHISTAMINES

- Second generation antihistamines e.g. cetirizine, loratadine are favoured
- Effective against nasal itch, sneezing, rhinorrhoea and ocular symptoms; modest effect on nasal congestion
- First generation antihistamines e.g. diphenhydramine, chlorpheniramine are sedating and should be avoided
- Regular treatment is more effective than PRN

## INTRANASAL CORTICOSTEROIDS

- Sprays and drops available
- Most effective anti-inflammatory agent
- Effective against nasal symptoms; no effect on ocular symptoms
- Delayed onset of action of several days
- Best used as prophylaxis

## IMMUNOTHERAPY

- Immunotherapy is the only treatment that alters the disease course
- Used if non-responsive to allergen avoidance and drugs
- Sublingual immunotherapy is preferable and needs to continue for 3 years to give lasting affect
- May prevent future asthma