AN APPROACH TO THE MANAGEMENT OF ALLERGIC RHINITIS

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ALLERGY

... an abnormal reaction of the tissues to certain substances ... allergens
ALLERGENS . . .

... are antigens, capable of making the body produce antibodies
ANTIBodies

... in allergic subjects, another form of antibody – IgE – is produced
IgE - ANTIBODIES

... these easily fix on tissue cells, including nasal and bronchial mucosa or skin ...
... initiating the secretion of pharmacologically active substances – histamine – that lead to clinical manifestations ...
... increased capillary permeability

→ oedema

... serous glands stimulated

→ watery secretions
... oedema → blocked nose

... secretions → runny nose
MANAGEMENT OF ALLERGIC RHINITIS
GETTING IT RIGHT

“I’ve got sinus, Doctor”
Basic concepts and definitions:

Patients presenting with nasal obstruction, with/without discharge may have:

- **ALLERGIC RHINITIS** / “HAYFEVER”
- “TRUE” INFECTIVE SINUSITIS
- **OTHER**
  
e.g. Structural, Polyps, Tumours, Adenoids, etc
ALLERGIC RHINITIS:

- CHARACTERISTIC SYMPTOMS:
- CHARACTERISTIC SIGNS:
- ALLERGY TESTS:
SYMPTOMS OF ALLERGIC RHINITIS:

- Bouts of sneezing
- Itch (nose, eyes, palate, teeth)
- Watery discharge (nose, eyes)
- Reaction to allergens (cats, house dust, pollen)
- History hay fever/asthma/eczema in patient or family
SIGNS OF ALLERGIC RHINITIS:

EXTERNAL:
(children)
- Nasal crease
- Nasal “salute”
- “Shiners”

INTERNAL:
- Swollen, pale
  “blue/ grey”
  inferior turbinates
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- Swollen pale "blue" inferior turbinates
ALLERGY TESTS:

- Skin tests
- RAST tests
- Eosinophils
- Provocation tests
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SKIN TESTS

- flexor aspect forearm
- wheal and flare in 20 min

Negative control - carrier substance
Positive control - histamine

(Resuscitation equipment in case of anaphylaxis)
ALLERGY TESTS:

- **Skin tests**
- **RAST tests**
- **Eosinophils**
- **Provocation tests**
Blood tests

- RAST (radioallergosorbent test)

Safer but expensive

and no diagnostic superiority over skin tests
ALLERGY TESTS:

- Skin tests
- RAST tests
- Eosinophils
- Provocation tests
Nasal smears

- increased eosinophils
- indicates allergy
- not diagnostic
ALLERGY TESTS:

- Skin tests
- RAST tests
- Eosinophils
- Provocation tests
Provocation tests

- a drop of suspected allergen in the nose causes symptoms
DIFFERENTIAL DIAGNOSIS
DIFFERENTIAL DIAGNOSIS

- SINUSITIS
- STRUCTURAL e.g. deviated septum
- POLYPS
- TUMOURS
- ADENOID ENLARGEMENT (children)
DIFFERENTIAL DIAGNOSIS

SINUSITIS:

- Headache/facial pain
- Fever
- Discoloured nasal discharge

COMPLICATIONS IF NEGLECTED INCLUDE:

- Orbital abscess
- Brain abscess
DIFFERENTIAL DIAGNOSIS

SINUSITIS
DIFFERENTIAL DIAGNOSIS

SINUSITIS:

- Headache/ facial pain
- Fever
- Discoloured nasal discharge

COMPLICATIONS IF NEGLECTED INCLUDE:

- Orbital abscess
- Brain abscess
Left Orbital Abscess
Frontal sinusitis - right orbital abscess
Brain and orbital abscesses
DIFFERENTIAL DIAGNOSIS

- STRUCTURAL:
  - deviated septum
DIFFERENTIAL DIAGNOSIS

- POLYPS
DIFFERENTIAL DIAGNOSIS

- TUMOURS
DIFFERENTIAL DIAGNOSIS

- ADENOID (children)
  - snoring
  - mouth breathing
  - nasal obstruction
MANAGEMENT OF ALLERGIC RHINITIS

- AVOIDING THE ALLERGEN
- TREATING THE SYMPTOMS
- “DESENSITISATION”
- (SURGERY)
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MANAGEMENT

AVOIDING THE ALLERGEN

INHALANTS
- House dust mite
- Pets
- Feathers
- Others difficult to avoid (grass, pollen, etc.)

INGESTANTS
- ? in allergic rhinitis (?? dairy products / wheat)
MANAGEMENT

- AVOIDING THE ALLERGEN
MANAGEMENT

TREATING THE SYMPTOMS

- “Irritative” symptoms
  (itch, sneeze, watery discharge)
  - Antihistamines (systemic > local)
  - Mast cell stabilisers (topical)

- Obstruction
  - Until now, corticosteroids (systemic/local)
  - Desloratadine / Cetirizine
MANAGEMENT

TREATING THE SYMPTOMS

CHOOSING YOUR STEROID

- SYSTEMIC: Short course orally or IMI
  - Efficacy
  - Very low systemic absorption, especially children
  - Non-irritating, odourless (preservative/carrier)

- NASAL SPRAYS:
MANAGEMENT

TREATING THE SYMPTOMS

CHOOSING YOUR ANTIHISTAMINE

- Efficacy
- Non-sedation
- Cardiac side-effects (dysrhythmias)
- Cost
MANAGEMENT

- **DESENSITISATION**

  - 1 or 2 allergens only
  - pollen usually
  - anaphylaxis risk
MANAGEMENT

- Nasal abnormalities
  - nasal septal deviation
  - turbinate hypertrophy
  - sinus disease
  - may complicate and exaggerate symptoms
  - treated on their own merit
MANAGEMENT

- **Surgery**
  - not for symptom control
  - improves “access” for topical medication
  - turbinate surgery for severe obstruction
Allergy society

- Pamphlet ... advice on avoidance
  - lifestyle modification
  - management
  - support
After-care

- Most allergic rhinitis managed at Primary level

- Advice on avoidance once allergen identified
ALLERGIC RHINITIS

Incurable

but . . .

TREATABLE