

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 ...

IgE - ANTIBODIES

... 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”

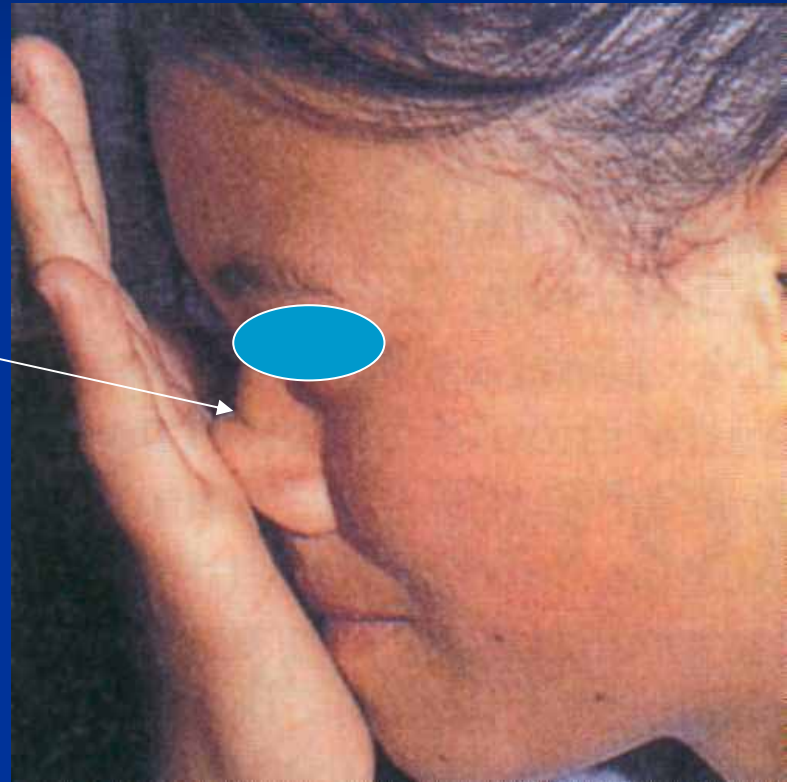
INTERNAL:

- Swollen, pale
“blue/grey”
inferior turbinates

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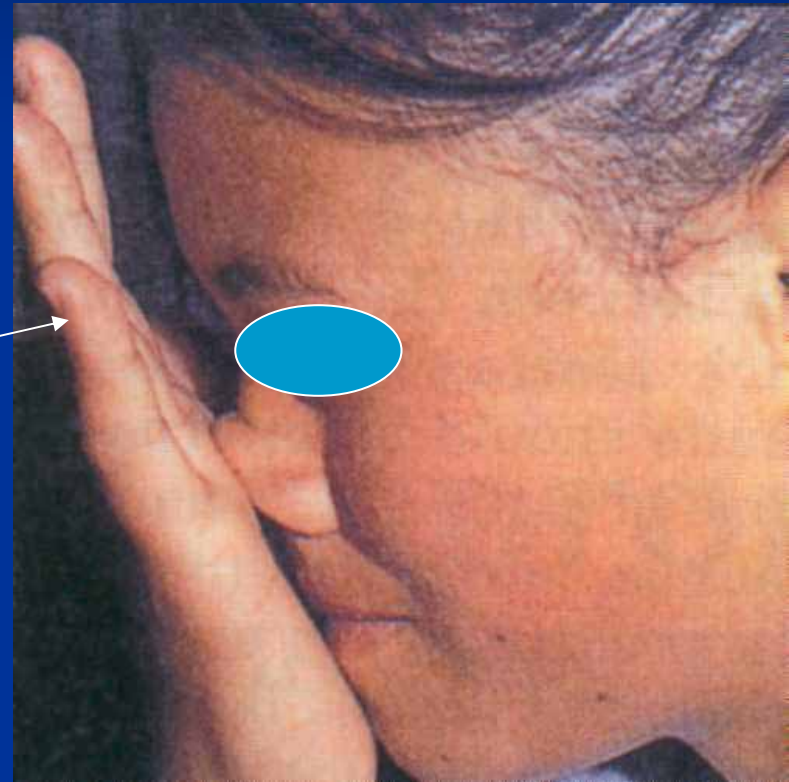
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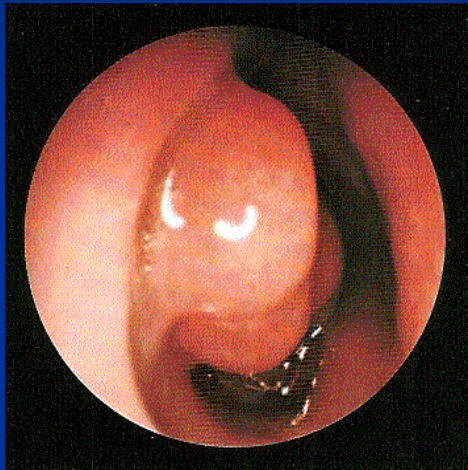
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SIGNS OF ALLERGIC RHINITIS:

INTERNAL:



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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

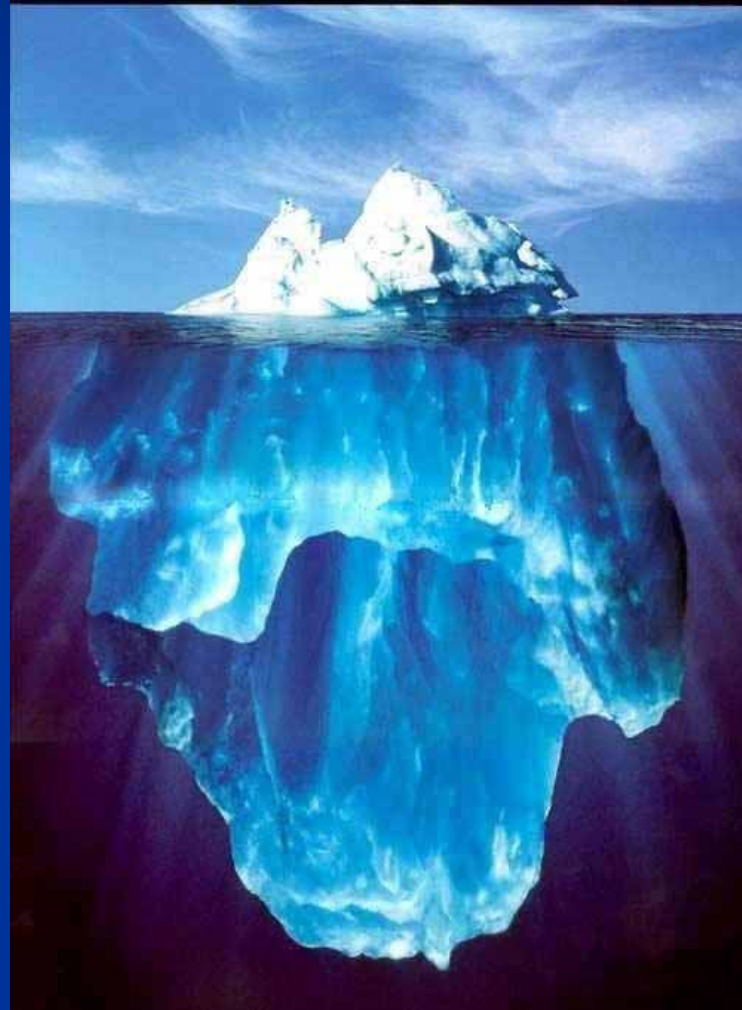
- Provocation tests

- a drop of suspected allergen in nose causes symptoms

DIFFERENTIAL DIAGNOSIS



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DIFFERENTIAL DIAGNOSIS

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

DIFFERENTIAL DIAGNOSIS

SINUSITIS:

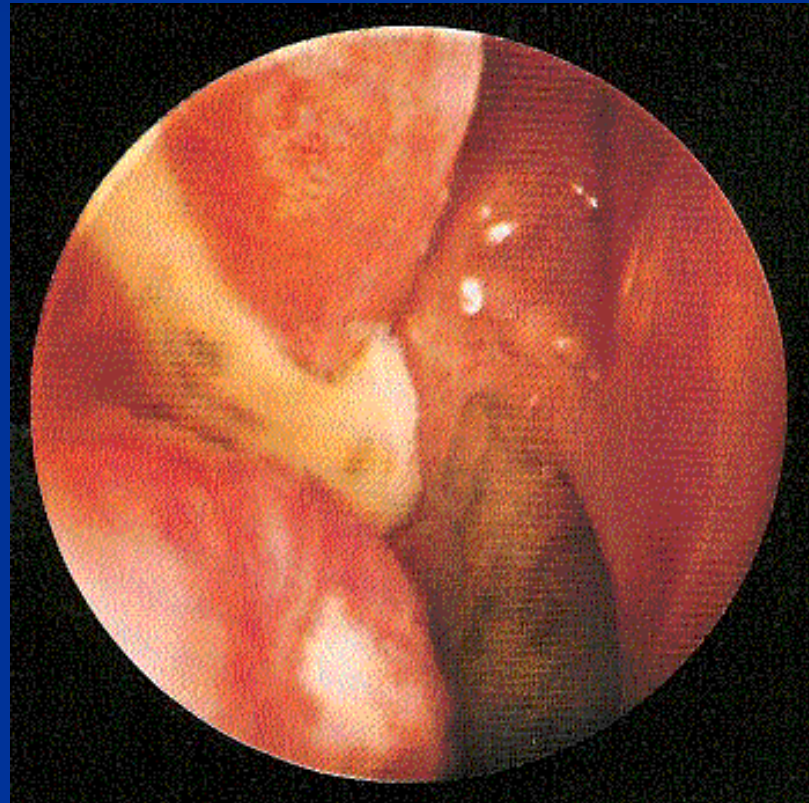
- Headache/facial pain
- Fever
- Discoloured nasal discharge

COMPLICATIONS IF NEGLECTED INCLUDE:

- Orbital abscess
- Brain abscess

DIFFERENTIAL DIAGNOSIS

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DIFFERENTIAL DIAGNOSIS

SINUSITIS:

- Headache/facial pain
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Left Orbital Abscess



Frontal sinusitis – right orbital abscess



Brain and orbital abscesses





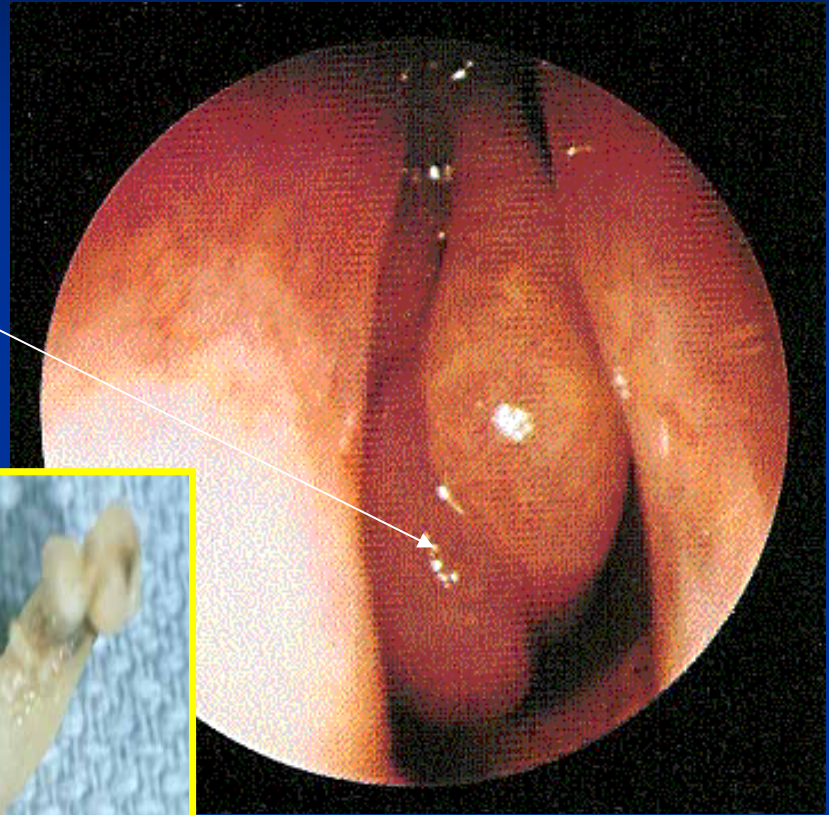
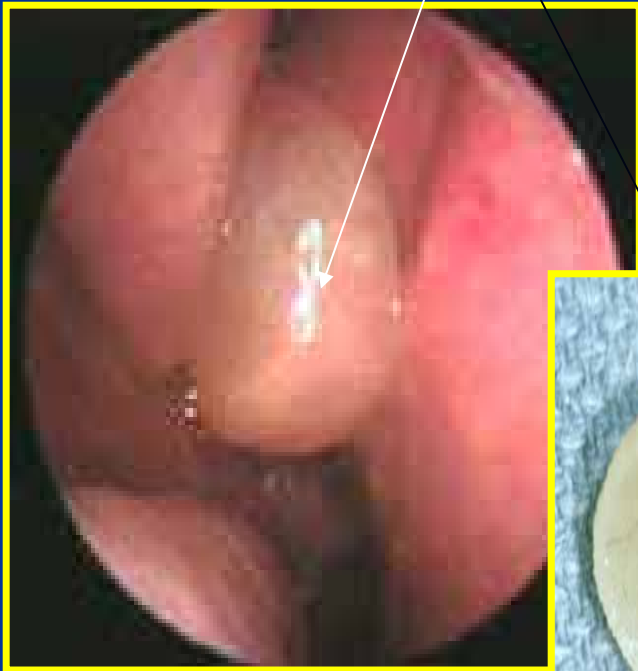
DIFFERENTIAL DIAGNOSIS

- STRUCTURAL:
 deviated septum



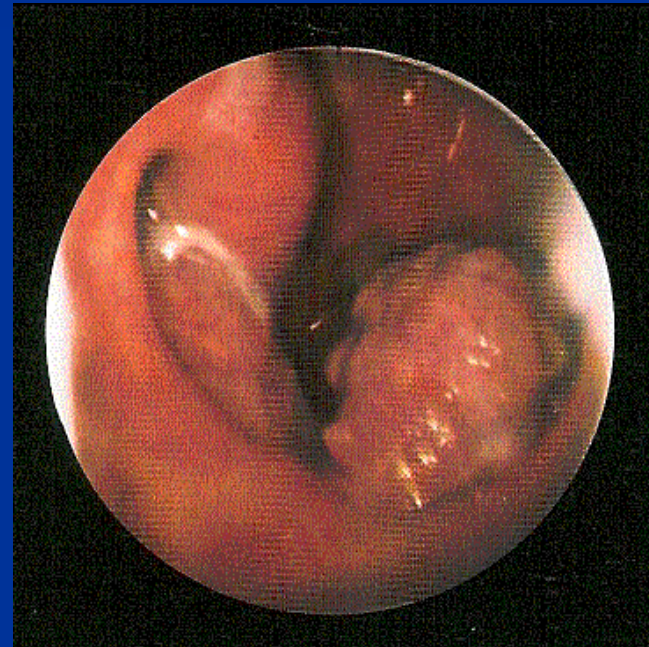
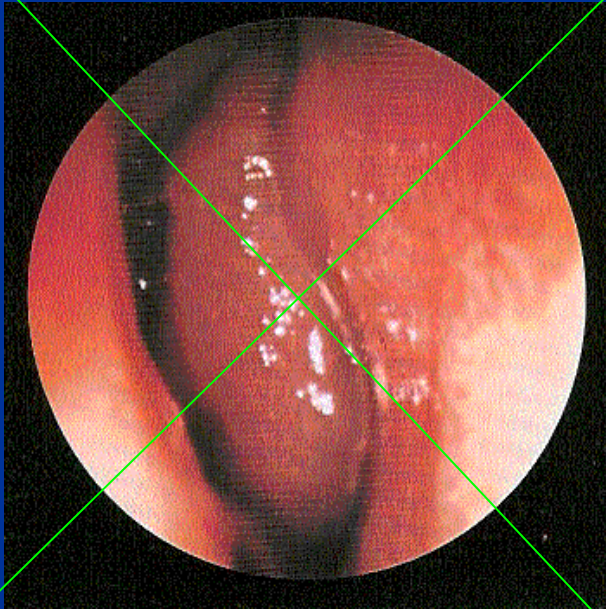
DIFFERENTIAL DIAGNOSIS

■ POLYPS



DIFFERENTIAL DIAGNOSIS

- TUMOURS



DIFFERENTIAL DIAGNOSIS

■ ADENOIDS

(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
- NASAL SPRAYS:
 - Efficacy
 - Very low systemic absorption, especially children
 - Non-irritating, odourless (preservative/carrier)

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

- Pamphletadvice 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