

Nasal obstruction

Blocked nose

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Causes

- Congenital
 - choanal atresia
 - repaired cleft palate
 - tumours

Causes

- Acquired
 - trauma
 - polyps
 - neoplasms
 - PNS masses
- (without discharge)

Causes

- Acquired - mucosal inflammation
 - (with discharge)
 - viral
 - bacterial
 - chemical
 - allergy
 - foreign body
- (unilateral, foul-smelling)

Causes

- Congenital - choanal atresia
 - (uni- or bilateral, soft-tissue or bony)
 - ~ presents at birth
 - ~ bilateral is problem as neonate is obligate nose breather
 - ~ airway must be provided as emergency

Causes

- Congenital - repaired cleft palate
 - ~ before repair - “common” airway
 - ~ after repair maxillary crest may occlude nose
 - ~ provide oral airway
 - ~ surgical correction

Causes

- Congenital - tumours

~ meningo-encephalocoele

!! biopsies in nose !!

~ nasal glioma

NB radiological imaging

Causes

- Acquired - trauma
(without discharge)

Nasal trauma

- May be part of **more extensive injury** to face, skull, skull-base, neck, chest

**REMEMBER TO CONSIDER THE AIRWAY
AND EXCLUDE
CERVICAL SPINE INJURIES**

Remember that low velocity trauma usually results in isolated nasal injury, while high-velocity trauma often has accompanying facial fractures and **cervical spine injury** must be considered

N.B.

- Document all injuries, symptoms and signs
- Supplement notes with drawings, diagrams and photographs

These injuries often require reports for legal purposes and good, clear documentation is vital

Causes

- Acquired
 - trauma
 - ~ deviated septum
 - unilateral

Deviated septum

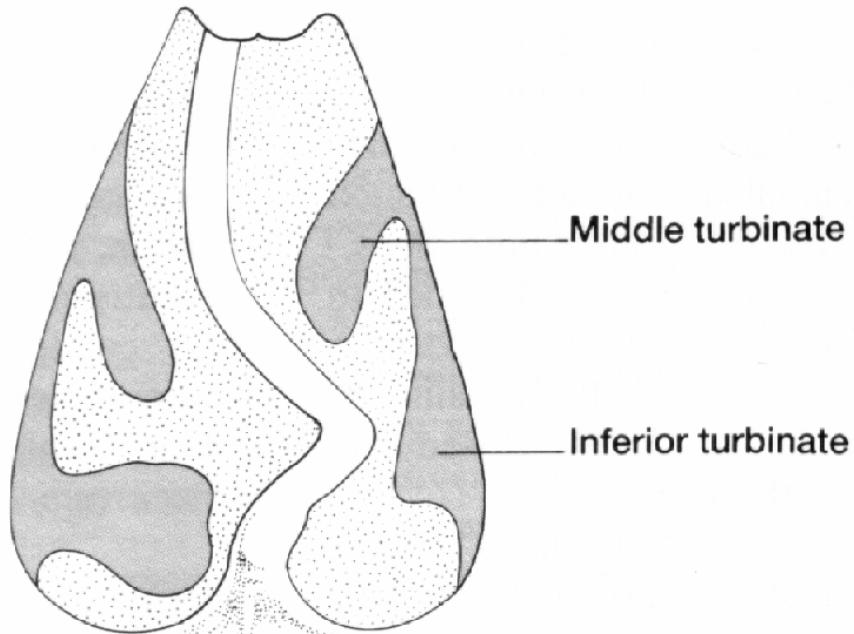
- Developmental as well as
- Traumatic

The convexity of the septum is usually to the obstructed side while the concave side often has enlarged (compensatory) inferior and middle turbinates.

Septal deviations

- A truly straight septum is rare - deviations, deflections and spurs occur and, if severe, can cause obstruction.
- Perceptions of “abnormality” are subjective as some patients with minimal loss of airflow complain bitterly while complete obstruction is often an incidental finding in others.

Septal deviation



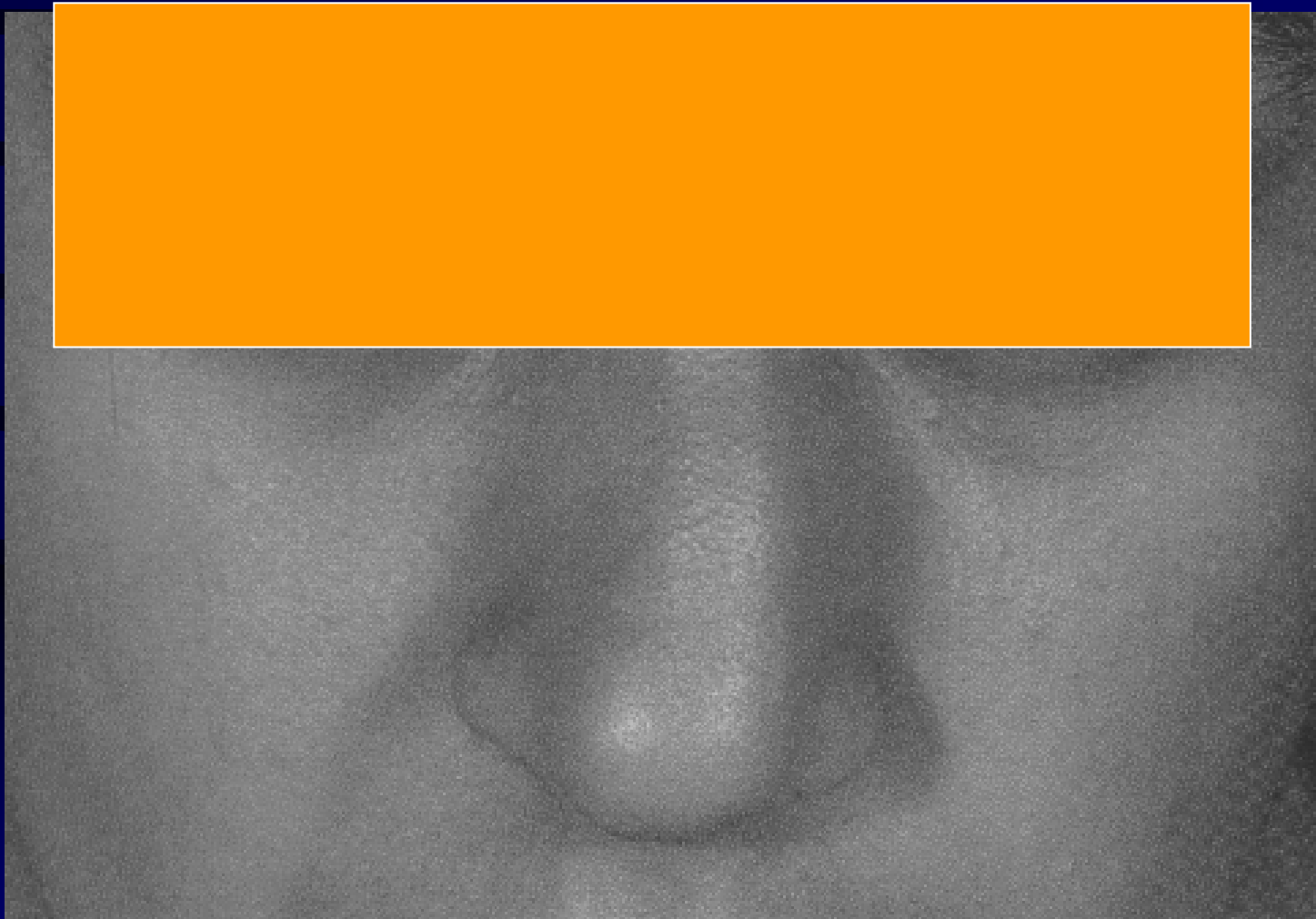
Symptoms

- Usually unilateral
- Obstruction
 - convex side - septum itself
 - concave side - turbinate
- Facial pain / sinusitis
 - enlarged turbinate
- Chronic otitis media
 - E.Tube dysfunction

Clinical appearance

- External appearance of the nose gives idea of symmetry.
- Inspection (anterior & posterior rhinoscopy)
 - deflection(s)
 - caudal dislocation
 - spur(s)
 - compensatory turbinate enlargement

External deformity



Treatment

- Depends on degree of symptoms / discomfort
- If surgery is indicated, choice is between septoplasty and submucosal resection
- Aim is to straighten or remove the deviated section and reposition it in the midline, while retaining adequate support of the nasal dorsum
- Turbinates may be trimmed or realigned

Causes

- Acquired - trauma

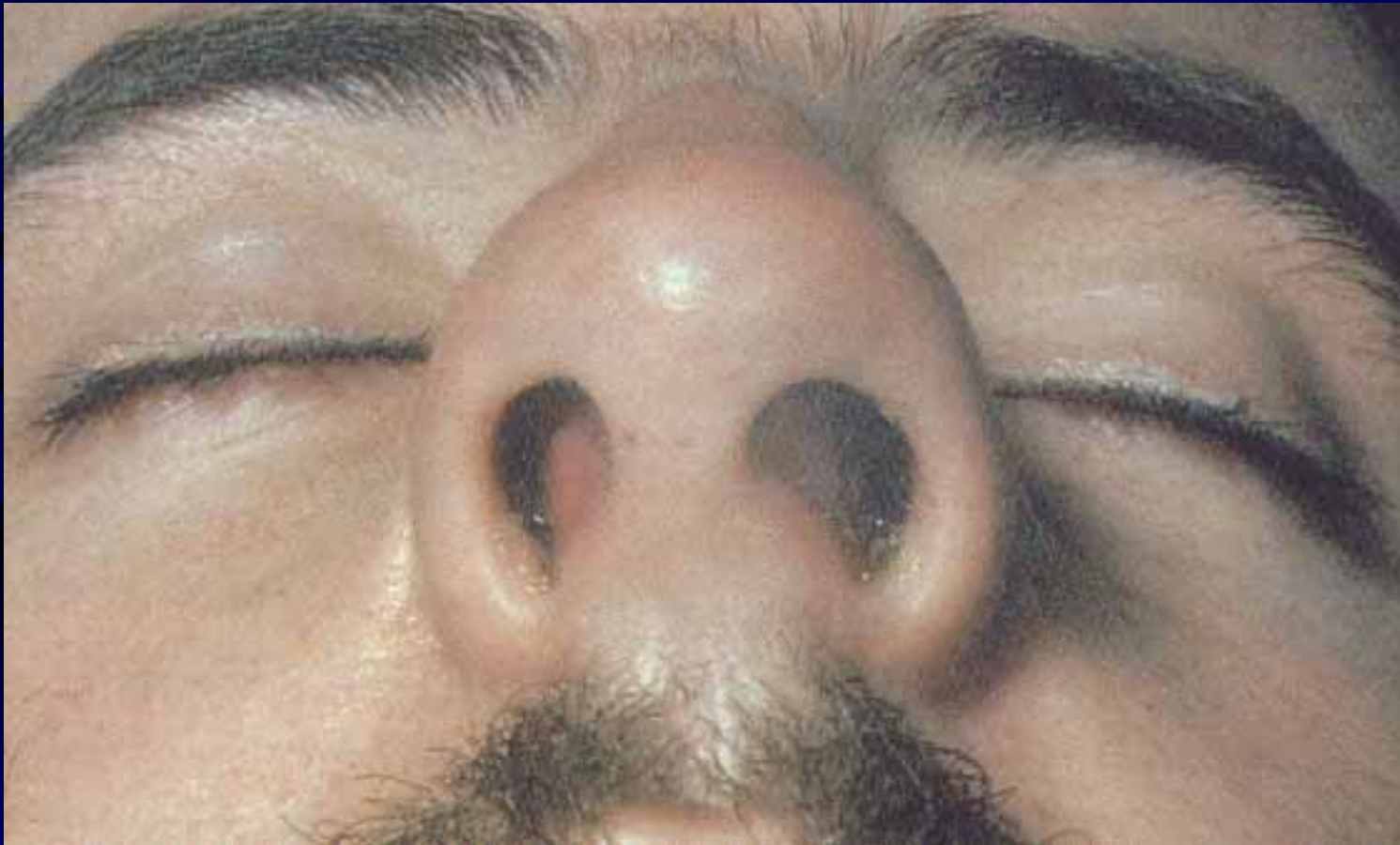
(without discharge)

~ septal haematoma

- bilateral

Surgical correction – haematoma as emergency

Septal haematoma



Management

- Septal haematoma

(collection of blood beneath mucoperichondrium causing bilateral complete obstruction)

- aspirate if small
- usually incise and drain with a “quilt” suture to prevent re-collection
- appropriate antibiotic cover

Management

- If septal haematoma is missed or not treated adequately, septal abscess may follow and result in cartilage necrosis and “saddle” deformity

Saddle deformity



Causes

- Acquired

(without discharge)

- polyps

~ “grapes”

~ non-tender

~ clinical diagnosis

~ **NOT inferior turbinate**

Surgical removal + steroids (topical, systemic short term)

Causes

- Acquired - neoplasms
 - (without discharge)
 - inverted papilloma
 - juvenile angiofibroma
 - malignancies

Surgical excision

Causes

- Acquired - Post Nasal Space masses
(without discharge)
 - ~ adenoids (commonest in children)
 - ~ carcinoma / lymphoma
 - ~ angiofibroma

Surgical removal

Causes

- Acquired - mucosal inflammation
 - (with discharge)
 - viral
 - ~ clear rhinorrhoea
 - ~ chills, fever
 - bacterial
 - ~ purulent rhinorrhoea

Symptomatic + antibiotics if indicated

Symptomatic treatment

- Decongestants - systemic - pseudo-ephedrine
 - antihistamine
 - topical
- Antipyretics
- Antibiotics - 2° bacterial infection
 - ? always in children from lower socio-economic groups
- Steam inhalations

Causes

- Acquired - mucosal inflammation
 - (with discharge)
 - chemical
 - ~ nose drops
 - (rhinitis medicamentosa)
 - inflamed mucosa
 - clear rhinorrhoea

Causes

- Acquired - mucosal inflammation
 - (with discharge)
 - allergy
 - ~ atopy history
 - ~ seasonal or perennial
 - ~ obstruction, rhinorrhoea, itch

Allergen avoidance ± antihistamines ± topical nasal steroids

Causes

- Acquired - mucosal inflammation

(with discharge)

- foreign body

~ unilateral, foul-smelling
rhinorrhoea in a child is a
foreign body until disproven.

Visualise and remove \pm local anaesthetic

Conclusion – common sense

- Identify cause
- Remove cause
- Treat any underlying / residual problems
- Reassurance