Nasal Obstruction

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**Definition:**
Is a sense of blockage within the nose or difficulty breathing out of one or both nostrils.
**Classification:**

- Physiological: Alternating, or Position-dependent.
- Bilateral or unilateral.
- Partial or complete.
- Continuous or intermittent.
- Acute, chronic or recurrent.

**Causes:**

- Almost all nasal diseases may cause nasal obstruction.
- **Common cold** is the commonest cause of nasal obstruction.
- **Allergy** is the second common cause of nasal obstruction in general, and the commonest cause of chronic or recurrent nasal obstruction.
Classification

**Classification:**
1. Nose
2. Sinuses
3. Nasopharynx

**Coronal CT**
Axial CT

Sagittal CT
Causes (Cont'd):

A. Causes in the Nose:


2. Trauma, e.g., septal hematoma, foreign bodies, irritant fumes.

3. Rhinitis:
   i. Acute, e.g., common cold (commonest cause).
   ii. Chronic:
      a. Non-specific: hypertrophic, atrophic (primary or secondary).
      b. Specific (granulomata), e.g., scleroma.
• **Atrophic rhinitis:**
  Atrophy of the nasal mucosa and turbinates.
  The aetiology is largely unknown.
  Nasal obstruction is caused by turbulent airflow and crusting in the nasal passages.

5- **iatrogenic:**
1. **Rhinitis medicamentosa:** prolonged use of topical nasal decongestants may result in rebound congestion of the nasal mucosa.
2. Other; include **alcohol** (engorgement of nasal membrane), **oestrogen** (engorgement of nasal mucosa), **tobacco** (irritation of mucous membranes and impairment of ciliary action).
3. **Post-operative**, e.g. post septo-rhinoplasty.
Causes (Cont’d):

8. Nasal allergy and vasomotor rhinitis.
9. Tumors: e.g. inverted papilloma or carcinoma.

B. Causes in the Sinuses:
1. Acute rhinosinusitis.
2. Chronic rhinosinusitis.
3. Tumors
Causes (Cont’d):

**C- Causes in the Nasopharynx:**

1. Adenoids (Children).

2. Nasopharyngeal angiofibroma (young adult males).
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1. Adenoids (Children).
2. Nasopharyngeal angiofibroma (young adult males).
3. Nasopharyngeal carcinoma (old males).

Commonest causes of Unilateral Nasal Obstruction
1. Congenital Choanal atresia
2. Traumatic eg. FB
3. Deviated septum
4. Tumors
5. Antrochoanal Nasal Polyp

6. Dental Maxillary sinusitis
Secondary Effects of nasal obstruction (specially bilateral longstanding obstruction):

1. Mouth breathing.
2. Nasal tone of speech (Rhinolalia clausa).
4. Eustachian tube obstruction.
5. Bronchopulmonary infections.
6. Skeletal changes in children e.g. adenoid facies

Management of Nasal Obstruction:

A. Diagnosis:
   1. Clinical examination.
   2. Endoscopy
   3. Assessment of nasal patency:
      i. Subjective (scoring systems).
      ii. Objective: Rhinomanometry and acoustic rhinometry.
   4. Other investigations: X-rays, CT scans, MRI, allergy testing, biopsy....etc.

B. Treatment of the Cause.
Thank you ...