Tonsillectomy and Adenoidectomy

Acute Tonsillitis:-

- Acute tonsillitis: is an infection which primarily affects the palatine tonsil. Although the disease is seen in adults, it is most frequent in childhood, presumably because immunity to common organisms has not been fully established.

Causative Agents:-

1. Viruses (e.g. influenza, parainfluenza, adenoviruses, enteroviruses & rhinoviruses).
2. Bacteria (B-haemolytic streptococcus, streptococcus pneumoniae, haemophilus influenzae & anaerobic organisms).

Clinical Features:-

1. Prodromal illness with pyrexia, malaise & headache .
2. Sore throat.
3. Pain may radiate to ears or may occur in the neck due to cervical lymphadenopathy.
4. Swallowing may be painful (odynophagia)
5. Muffled voice.

6- Trismus & dribbling.

7- Some children may have abdominal pain & occasionally vomiting.

8- The tonsils are found to be hyperaemic on examination with pus & debris in the crypts.

9- There will be tender cervical lymphadenopathy, particularly the jugulodigastric nodes.

Differential Diagnosis:-

1. Glandular fever.
2. Agranulocytosis.
3. Leukaemia.
4. Diphtheria

Treatment:-

- **Antibiotics**: penicillin
- **Analgesia**: paracetamol

Complications of Acute Tonsillitis:-

Local:-

1- Abscess formation (peritonsillar, parapharyngeal, retropharyngeal).

2- Acute otitis media.

3- Recurrent acute tonsillitis (chronic tonsillitis).

- General

1- Septicaemia.

2- Meningitis.

3- Acute rheumatic fever.

4- Acute glomerulonephritis.

Differential diagnosis of unilateral tonsil enlargement:-

1- Asymmetry in a patient with recurrent bouts of acute tonsillitis.

2- Neoplasia (squamous cell carcinoma or lymphoma).

3- Apparent enlargement (peritonsillar abscess or parapharyngeal mass).

Differential diagnosis of ulceration of the tonsil:-

1. Infection.
    - Acute streptococcal tonsillitis.
    - Diphtheria.
    - Infectious mononucleosis.
    - Vincent's angina.
2. Neoplasm.
    - Squamous cell carcinoma.
    - Lymphoma.

- Salivary gland tumours (adenoid cystic carcinoma).

3. Blood diseases.
   - Agranulocytosis.
   - Leukaemia.
4. Other causes.
   - Aphthous ulceration.
   - Behget's syndrome.
   - Acquired immunodeficiency syndrome (AIDS).

Tonsillectomy:-

Indications:-

A- Local:-

1. Recurrent episodes of acute tonsillitis(6 per yr, 4 per yr in 2 successive yrs ,or 3 per yr in 3 successive yrs).
2. Previous episodes of peritonsillar abscess (quinsy)(hot Ts vs interval Ts after 6wk.).
3. Suspected malignant neoplasm (unilateral enlargement or ulceration).
4. Benign tumors or cysts of the tonsil.

5. Part of another procedure (UPPP, access to glossopharyngeal nerve or styloid process).

6. Gross enlargement causing airway obstruction (sleep apnoea syndrome) or difficult deglutition.

7. Tonsilar FB embeded in the tonsil and can not be removed.

8. Diphtheria carrier.

9. tonsilolithiasis.

10. Branchial fistula when one end of the tract being in posterior faucial pillar.

B-Focal:-

When a neighbouring organ is affected by

the tonsil.

i. Persistent jugulodigastric lymphadenopathy following chronic tonsillitis.

ii. Tuberculous jugulodigastric lymphadenitis:

Tonsillectomy can be done under cover of anti tuberculus therapy.

iii. Chronic otitis media: Due to enlarged

tonsils impinging upon the eustachian tube.

iv. Chronic pharyngitis, laryngitis.

C- General:-

When tonsil acts as a septic focus to distant parts of the body.

i. Rheumatic heart disease and sub-acute bacterial endocarditis.

ii. Glomerulonephritis.

iii. Chronic bronchitis, if it follows after acute tonsillitis.

iv. Rheumatic arthritis.

v. Stunted growth or weak built.

After tonsillectomy, the number of attacks are reduced and are of lesser intensity.

Contraindications

- These contraindications are not absolute, but surgery should be delayed until the particular problem is resolved.

1. Recent episode of tonsillitis or URTI (within 2 weeks).
2. Bleeding disorder.
3. Oral contraceptive.
4. Cleft palate or submucosal dehecent.
5. During certain epidemics (e.g. polio due to the chance of bulbar polio).
6. Uncontrolled TB ,hypertension or syphilis.

Complications

1. Peroperative
   - Anaesthetic reaction.
   - Haemorrhage.
   - Damage to teeth.
   - Trauma to the posterior pharyngeal wall (careless insertion of the tongue blade).
   - Dislocation of the temporomandibular joint by overopening the mouth gag.
2. Immediate
   - Reactionary haemorrhage.
   - Anaesthetic complications.
3. Early
   - Secondary haemorrhage.
   - Haematoma and oedema of the uvula.
   - Infection (may lead to secondary haemorrhage).
   - Earache (referred pain or acute otitis media).
   - Pulmonary complications (pneumonia and lung abscess are rare).
   - Subacute bacterial endocarditis (if the patient has a cardiac defect).
4. Late
   - Scarring of the soft palate (limiting mobility & possibly affecting voice).
   - Tonsillar remanats (which may be the site of recurrent acute infection).

Adenoids:-

- The adenoids are a mass of lymphoid tissue found at the junction of the roof & posterior wall of the nasopharynx. They are a normal structure with a function in the production of antibodies (lgA, IgG & IgM). The size of the adenoids varies, but in general they attain their maximal size between the ages of 3 & 8 years & then regress.

Pathology:-

Inflammation due to acute viral & bacterial infections results in hyperplasia with enlargement& multiplication of the lymphoid follicles.

Most of the pathological effects related to the adenoids are due to this increase in size.

- The symptoms caused by hypertrophy result not from the actual size of the lymphoid mass, but from the relative disproportion in size between the adenoids& the cavity of the nasopharynx.

The effect of the enlargement is to produce obstruction of the nasal airways &possibly obstruction of the Eustachian tubes.

Clinical Features:-

1. Nasal obstruction:-
   - Bilateral nasal obstruction.
   - Bilateral nasal discharge.
   - Mouth breathing.
   - Snoring.
   - Sleep apnea syndrome.
   - Failure to thrive.
2. Eustachian tube obstruction:-
   - Earache.
   - Deafness.

Investigations

1. Lateral soft-tissue radiograph.
2. Examination under GA.

Indications

1. Nasal obstruction.
2. Otitis media with effusion (glue car).
3. Recurrent acute otitis media.
4. Chronic rhinosinusitis,

5. Sleep apnea syndrome.

Contraindications

1. Recurrent upper respiratory tract infection.
2. An uncontrolled bleeding disorder.
3. Cleft palate.

Complications:-

- 1. Immediate.
- Anaesthetic complications.
- Soft palate damage.
- Dislocation of the cervical spine.
- Reactionary haemorrhage.
- 2. Intermediate.
- Secondary haemorrhage.
- Sublaxation of the atlanto-occipital joint (secondary to infection).

3. Late
   - Eustachian tube stenosis.
   - Hypernasal speech (rhinolalia aperta).
   - Persistence of symptoms.