Infections of Pharynx, Parapharyngeal space & Retropharyngeal space

Acute Non- Specific Pharyngitis

Aetiology

A) Infections

1. Viruses. Especially adenovirus & rhinovirus, particularly in children.
2. Bacterial. Especially the haemolytic streptococcus, less commonly the non-haemolytic streptococcus, pneumococcus, or Haemophilus influenzae.
3. Fungal : Candida (oral thrush)

B) Non-infectious causes

1. Dry air.
2. Allergy/postnasal drip.
3. Chemical injury.
4. Gastrooesophageal reflux.
5. Smocking.
6. Neoplasia.
7. Endotracheal intubation.

- It is more common in cold weather & in persons with lowered resistance.
- It is a common & important prodromal manifestation of measles, scarlet fever, glandular fever & influenza & also rarely of typhoid, smallpox & secondary syphilis.

Clinical Features

- **Mild (simple)**

1. Sore throat especially on swallowing.
2. Earache sometimes.
3. Enlargement & tenderness of the cervical lymph nodes.
4. Low pyrexia.
5. Marked injection of the mucosa.

Complications are rare but acute rheumatism & nephritis must be watched for.

- **Severe (septic)**

1. High pyrexia, up to 102-105F.
2. Rigor may initiate the attack.
3. Oedema of soft palate & uvula.
4. Mucopurulent exudates. A soft, non-adherent membrane may present imitating diphtheria.
5. Circumoral pallor & flushed are common.

Complications: are common in children. They include acute otitis media, oedema of the glottis, Ludwig's angina, septicaemia, pleurisy, pericarditis, nephritis &meningitis.

Differential Diagnosis

1. Glandular fever.
2. Diphtheria.
3. Exanthemas diseases.
4. Blood dyscrasias.

Treatment

- In many patients, resolution occurs within 3-7 days on simple conservative therapy (rest, fluids, aspirin or one of its derivatives).
- Systemic antibiotics are necessary in more severe cases.
- Tracheostomy may be required if oedema spreads to the laryngeal inlet.

Chronic Non-specific Pharyngitis

This is a common condition & is due to chronic infection of the aggregates of submucosal lymphatics in the posterior pharyngeal wall.

Aetiology

There are many causative and contributory factors:

1. Recurrent attacks of acute Pharyngitis.
2. Nasal obstruction and infections.
3. Excess of alcohol and tobacco.
4. Prolonged exposure to dry and dusty atmospheres.
5. Infected gums and teeth.
6. Pharyngeal neurosis, leading to excessive hawking.
7. Faulty or excessive use of voice.

Clinical Types

1. **Catarrhal.** In which there is either a dusky red congestion of the mucosa or a pale oedema. The uvula may appear enlarged or elongated.
2. **Hypertrophic.** Small nodules of lymphoid tissue are scattered over the pharyngeal wall, giving a granular appearance
3. **Follicular.** Usually accompanied by a similar infection in the tonsils, when they are present. Small yellowish cysts are seen, commonly in the valleculae.
4. **Atrophic.** This is usually coexistent with atrophic rhinitis. The pharyngeal mucosa is dry and glazed, with some viscid mucus on the surface.

Symptoms

1. Irritation in the throat.
2. Constant hawking.
3. Tiring of the voice occur readily.
4. Snoring.

Treatment

1. Cause must be eradicated.
2. Speech therapy.
3. Reassurance. The exclusion of cancer helps many psychologically.
4. Cautery to the lymphoid patches is sometimes advocated.

Peritonsillar Abscess (Quinsy)

Definition: An abscess between the tonsil capsule & adjacent lateral pharyngeal wall.

- It follows an attack of tonsillitis.
- In the great majority the abscess is unilateral & lies above the tonsil near the soft palate.
- There is first cellulites, later frank pus.

Clinical Feature

1. Severe pain in the throat.
2. Pyrexia. Up to 104 °F.
3. Malaise.
4. Headache.
5. Rigor.
6. Trismus.
7. Earache.
8. Intense salivation & dribbling.
9. Thickened speech.
10. Foetor oris.
11. Cervical adenitis.
12. Marked hyperaemia & oedema of the tonsillar & palatal regions. The uvula is oedematous & pushed to the unaffected side. The tonsil itself may be almost or completely obscured. The reddened mucosa may be covered with mucopus.

Complications (rare with modern therapy)

- Parapharyngeal abscess.
- Haemorrhages.
- Oedema of the larynx.
- Septicaemia.

Differential Diagnosis

- Neoplasms of the tonsil.
- Parapharyngeal abscess.
- Retropharyngeal abscess.
- Aneurysm of the internal carotid artery.

Treatment

1. **Conservative.** In early stage of cellulites, conservative treatment may cure the infection.
    - Systemic antibiotics, in large intravenous dosage.
    - Analgesia.
    - Rest in bed.
    - Intravenous fluids, if necessary.
2. **Surgical treatment**
    - Aspiration.
    - Incision & drainage of the abscess.
    - Abscess tonsillectomy.

Parapharyngeal abscess

Definition: A suppurative infection of the parapharyngeal space.

Aetiology

Infection spreads from the tonsils, the tonsillar fossa, a penetrating foreign body or from a lower wisdom tooth & its surrounding gums & bone. The abscess may occur at any age, but is more frequent in adolescents & adults.

Clinical Features

1. Painful throat is usual.
2. Trismus is sometimes marked.
3. Pyrexia is usually between 101-102 °F & the patient feels ill.
4. Swelling of the neck may be considerable & is very tender.
5. Pharyngeal wall & tonsil are pushed medially.

Complications

1. Acute oedema of the larynx.
2. Thrombophlebitis of the internal jugular vein, with septicaemia & pyaemia.
3. Direct spread of infection:
    - To the fascial planes & spaces of the neck causing a localized swelling behind the sternomastoid muscle.
    - To the mediastinum (mediastinitis).

Differential Diagnosis

From peritonsillar abscess, retropharyngeal abscess, tumours & aneurysms.

Treatment

1. Systemic antibiotics.
2. Incision of the abscess is performed if fluctuation exists. This may be done through the pharynx or through the neck, depending on the point of maximum swelling but preferably by the later route. Inhalation of blood & pus must be prevented by efficient suction when the former route is used. Tracheostomy may rarely be necessary.

Retropharyngeal Abscess

Definition: The abscess lies in the potential space between the Buccopharyngeal & prevertebral fasciae.

A. Acute Retropharyngeal Abscess

Aetiology

The acute abscess is caused by suppuration in the retropharyngeal lymph nodes, which become infected from the nasopharynx & oropharynx. The commonest organism is streptococcus pneumoniae.

Clinical Features

1. Most often occur in infant.
2. Boys are more affected than girls.
3. Difficulty in breathing & suckling.
4. Croupy cough.
5. Stiffness of the neck or torticollis.
6. Pyrexia & toxaemia.
7. Lateral swelling of the posterior pharyngeal wall is seen on inspection through the mouth.
8. Oedema of the larynx may develop quickly.
9. Spontaneous rupture of the abscess may occur occasionally, & can cause sudden death from aspiration.

10. sore throat may be complained of in older patients.

Treatment

1. Incision of the abscess.
2. Systemic antibiotics.
3. Tracheostomy may become necessary when laryngeal obstruction threaten or supervenes.

B. Chronic Retropharyngeal Abscess

This occur in an adult or an older child, it is likely to be due to tuberculosis infection of the cervical spine. It is of slow onset and gives rise to pharyngeal discomfort, rather than pain, and to some degree of dysphagia. The lesion of the cervical spine is seen on radiography.

Treatment. The abscess is opened through an **incision** over the posterior border of the sternomastoid muscle and the abscess is sought for by dissection between the carotid sheath and the prevertebral muscles and is drained from the neck. Full **antituberculous** therapy must be ordered.