SUPPURATIONS OF SPACES RELATED TO THE PHARYNX

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Classification:

I. Intratonsillar abscess.
II. Peritonsillar abscess (Quinsy).
III. Parapharyngeal abscess.
IV. Retropharyngeal abscess (acute & chronic).

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Pharyngeal Suppurations

Intratonsillar Abscess

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Intratonsillar Abscess:

♦ Pus collection inside the tonsil dt. obstruction of one of the tonsillar crypts.
♦ Can be a rare complication of acute tonsillitis.

**SYMPTOMS:**
- Mild fever.
- Mild pain.
- Mild dysphagia.

**SIGNS:**
- Yellowish - well localized - soft cystic swelling.
- On the surface of the tonsil.

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Intratonsillar Abscess: (cont.)

**TREATMENT:**

- Incision under LA.
- General antibiotics & antiseptic gargles.
- Tonsillectomy (after cure).

Peritonsillar Abscess (Quinsy)

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Peritonsillar Abscess (Quinsy):

- A suppurative process in the peritonsillar space (between the capsule of tonsil & lateral pharyngeal wall).
- Usually follows an attack of acute tonsillitis.

**SYMPTOMS:**

**General:** High fever – headache – malaise.

**Local:**
- Marked sore throat.
- Referred otalgia.
- Bad odoured breath (*Halitosis*).
- Difficulty in mouth opening (*Trismus*).
- Marked dysphagia → Dribbling of saliva.

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Peritonsillar Abscess (Quinsy): (cont.)

**SIGNs:**

**General:** Temp. (39-40°C)
- Rapid strong bounding pulse.

**Local:**
- Difficult exam. dt. *Trismus*.
- Enlarged tender jugulo-digastric LNs.
- *Coated tongue* & accumulated saliva.
- Soft palate swelling above & lateral to inflamed tonsil.
- Tonsil pushed downwards & medially.
- Uvula edematous & pushed to other side.

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Peritonsillar Abscess (Quinsy): (cont.)

**SIGNs:** Appearance of a pale yellowish area over the swelling indicates abscess maturation (a point where it can *spontaneously* rupture).
Peritonsillar Abscess (Quinsy) : (cont.)

**COMPLICATIONS:**

- Sudden rupture & inhalation of pus → chest complications.
- Extension:
  - Laterally → Parapharyngeal abscess.
  - Downwards → Laryngeal edema & stridor.
- IJV thrombophlebitis.
- Pyemia & Septicemia.

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**TREATMENT:**

**Presuppurative stage:**

1. Bed rest.
2. Antibiotics & analgesics.

**Suppurative stage:**

1. Incision & drainage (Intraoral – under LOCAL anesthesia).
2. General antibiotics.
3. Tonsillectomy (one month later – to prevent recurrence).

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Peritonsillar Abscess (Quinsy): (cont.)

Sites of incision of Quinsy:

A. ½ cm lateral to junction of 2 lines.
B. Midway of a horizontal line.
C. The most pointing point.
D. The crypta magna.

Parapharyngeal Abscess

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Parapharyngeal Abscess:

- A suppurative process in the parapharyngeal space. *(pharyngomaxillary, lateral pharyngeal)*

Boundaries of parapharyngeal space:

It is an *inverted cone* lying in the lateral neck.

- **Superior**: Base of skull.
- **Inferior**: Hyoid bone.
- **Medial**: Sup. Constrictor m. of pharynx

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Parapharyngeal Abscess: (cont.)

**ETIOLOGY:**

1. Spread of infection from tonsils or quinsy.
2. Odontogenic infections (e.g. extraction of 3rd molar tooth).
3. Middle ear infections with bony destruction of mastoid tip (*Bezold’s abscess*).

![Image](image1.png)

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Parapharyngeal Abscess: (cont.)

**CLINICAL FEATURES:**

- Sore throat & Odynophagia.
- High fever.
- Tender **NECK SWELLING**.
- Pharyngeal wall & tonsil pushed medially.
- Trismus.

![Image](image2.png)

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Parapharyngeal Abscess: (cont.)

**COMPLICATIONS:**
1. IJV thrombosis (*Lemierre’s syndrome*).
2. Rupture of carotid artery.
3. Neurological sequelae due to involvement of CN’s IX-XII or sympathetic chain.
4. Spread of infection to mediastinum (*mediastinitis*).

**TREATMENT:**
- Systemic antibiotics.
- **Incision & drainage** (EXTERNALLY – along anterior border of sternomastoid m.)

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Retropharyngeal Abscesses

- **Acute.**
- **Chronic.**

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Acute retropharyngeal abscess:

- An abscess in the retropharyngeal space (**between the post. pharyngeal wall & prevertebral fascia**).

- Is dt. suppuration in the retropharyngeal LN’s of Henle [*present on each side of the midline*].

- These glands tend to **atrophy by age 4 or 5 years**, thus most of these abscesses occur in **pediatrics**.

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Acute retropharyngeal abscess: (cont.)

AETIOLOGY:

- Infection is usually transmitted from the nose, nasopharynx (adenoids) or oropharynx (tonsils).
- In adults “esp. immunocompromised” it may be 2ry to:
  - F.B in the post. pharyngeal wall.
  - Trauma from endoscopic procedures.
  - Oral endotracheal intubation.

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Acute retropharyngeal abscess: (cont.)

CLINICAL FEATURES:

- Fever with difficulty in suckling & breathing.
- Nuchal rigidity with tilting of head toward uninvolved side.
- Pharyngeal congestion with smooth swelling on ONE side of the post. pharyngeal wall (dt. adherence of buccopharyngeal & prevertebral fasciae in the midline).

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Acute retropharyngeal abscess: (cont.)

INVESTIGATIONS:

*Lateral soft-tissue neck radiograph* confirms the diagnosis.

Characteristic findings include:

- Abnormal thickening of prevertebral soft tissue (>50% of vertebral body).
- Reversal of normal cervical spine curvature.
- Air in prevertebral soft tissue.

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Acute retropharyngeal abscess: (cont.)

COMPLICATIONS:

1. Spontaneous rupture can cause sudden death from aspiration.
2. Laryngeal oedema & stridor.
3. Spread of infection to mediastinum (*mediastinitis*).

TREATMENT:

1. **Incision & drainage:**
   - Vertically - PERORALLY- without anesthesia “*esp. in infants*”- in a head-low position while using suction to avoid aspiration.
2. Systemic antibiotics.
3. Tracheostomy (in case of airway compromise).

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Chronic retropharyngeal abscess:

- A **cold abscess** behind the prevertebral fascia dt. T.B. of the cervical vertebrae (*Pott's disease*).

- It forms a **midline** swelling in the post. pharyngeal wall.

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**CLINICAL FEATURES:**

**Symptoms:**
- Generalized T.B. toxemia *(loss of weight)*.
- Mild fever “usually at night”.
- Excessive sweating.
- Mild dysphagia.
- Painful neck movements.

**Signs:**
- Normal Temp. & pulse.
- Tenderness along vertebrae.
- Enlarged painless cervical LNs.
- Midline cystic swelling on post. pharyngeal wall.
Chronic retropharyngeal abscess: (cont.)

INVESTIGATIONS:

Neck radiographs may show caries of the cervical vertebrae or calcified tuberculous LNs.

Chronic retropharyngeal abscess: (cont.)

TREATMENT:

1. Full anti-tuberculous drug therapy.

2. Incision & drainage:
   - Through the neck & never through the mouth.
   - Incision along the posterior border of the SCM under general anesthesia.

3. Stabilization of the spine in cases of spinal caries.
Ludwig’s Angina

Ludwig’s angina:

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Ludwig’s angina:

♦ This is a rapidly spreading, potentially fatal infection involving the submandibular space.

♦ It is characterized by:
  • Rapidly spreading cellulitis, with no tendency for abscess formation.
  • Involving both submaxillary & sublingual spaces, usually bilaterally.
  • Spread is by direct extension along fascial planes & not by lymphatics.

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Ludwig’s angina: (cont.)

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Ludwig’s angina: (cont.)

**AETIOLOGY:**

1. Dental or periodontal infections (70%) [esp. 2nd & 3rd lower molar teeth].
2. Penetrating injuries of the floor of mouth e.g. stab wounds, gunshot wounds, horse kick …etc.
3. Mandibular fractures.

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Ludwig’s angina: (cont.)

**CLINICAL FEATURES:**

- Young pt. with *poor dentition*.
- Unilateral *neck pain & swelling* that soon becomes *bilateral*.
- Increasing *oedema & brawny induration* of suprahypoid soft tissues & floor of mouth —— thrusting of tongue against the palate with resultant *respiratory embarrassment*.
- Increasing FEVER, neck rigidity, trismus & odynophagia.
- Many pts. *progress rapidly* from onset of symptoms to respiratory obstruction in 12-24 hrs.

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Ludwig’s angina: (cont.)

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Ludwig’s angina: (cont.)

TREATMENT:
1. Intensive I.V. antibiotic therapy.
2. Early airway maintenance.
3. Rapid surgical intervention:
   - Horizontal submental incision just above hyoid bone.
   - Mylohyoid muscle should be incised vertically.
   - A straw-colored exudate, rather than true abscess fluid is usually released.

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THANK YOU ..

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