SUPPURATIONS OF SPACES RELATED TO THE PHARYNX

Emad A. Magdy, M.D.

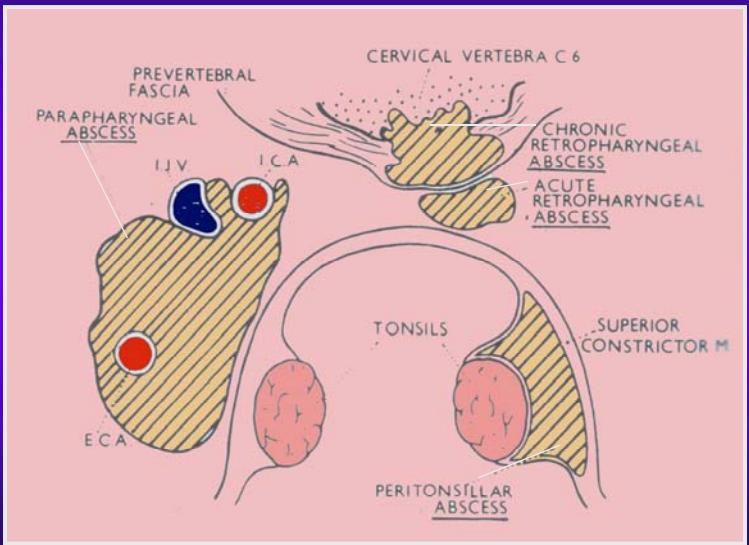
Assistant Professor,
Department of Otolaryngology – Head & Neck Surgery
Faculty of Medicine, Alexandria University

Classification:

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

Emad A. Magdy, M.D.

Pharyngeal Suppurations ..



Intratonsillar Abscess

Emad A. Magdy, M.D.

Intratonsillar Abscess :

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

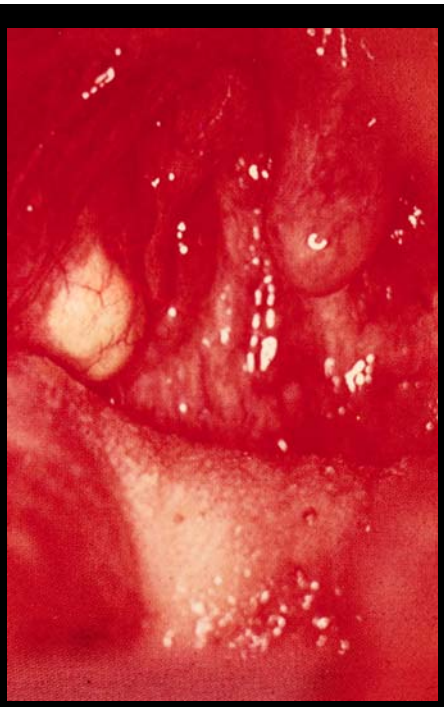
SYMPTOMS:

- Mild fever.
- Mild pain.
- Mild dysphagia.

SIGNS:

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

Emad A. Magdy, M.D.



Intratonsillar Abscess : *(cont.)*

TREATMENT:

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

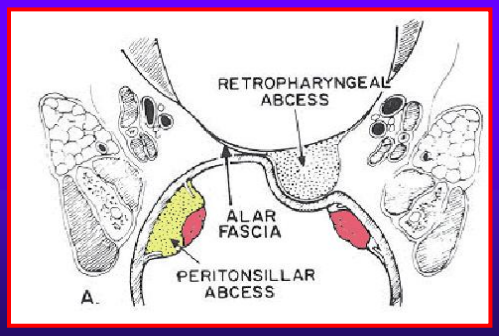
Emad A. Magdy, M.D.

Peritonsillar Abscess (Quinsy)

Emad A. Magdy, M.D.

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.



Emad A. Magdy, M.D.

Peritonsillar Abscess (Quinsy) :

SYMPTOMS:

General: High fever – headache – malaise.

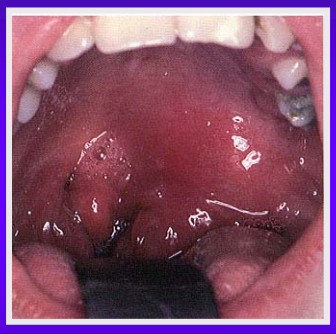
Local:

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

Emad A. Magdy, M.D.

Peritonsillar Abscess (Quinsy) : *(cont.)*

SIGNS:



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

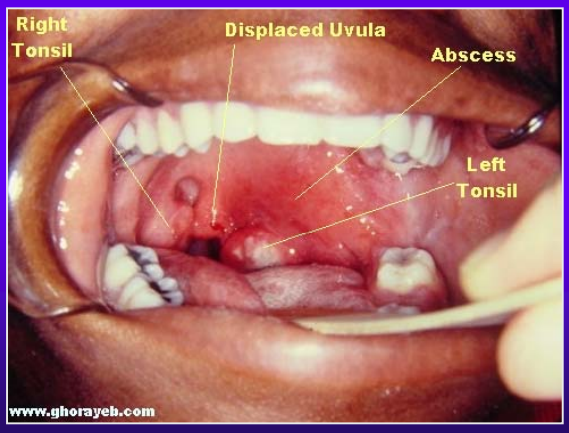
Local:

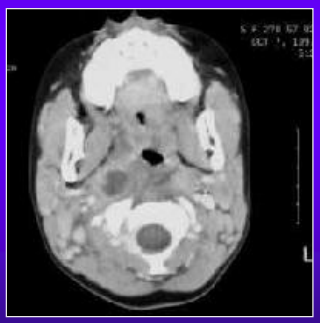
- Difficult exam. dt. *Trismus*.
- *Torticollis* (dt. Spasm of SCM).
- Enlarged tender jugulo-digastric LNs.
- *Coated tongue* & accumulated saliva.
- Soft palate swelling above & lateral to inflamed tonsil.
- Tonsil pushed downwards & medially.
- Uvula edematous & pushed to other side.

Emad A. Magdy, M.D.

Peritonsillar Abscess (Quinsy) : *(cont.)*

SIGNS: Appearance of a pale yellowish area over the swelling indicates abscess maturation (a point where it can *spontaneously* rupture).





Emad A. Magdy, M.D.

Peritonsillar Abscess (Quinsy) : *(cont.)*

COMPLICATIONS:

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

Emad A. Magdy, M.D.

Peritonsillar Abscess (Quinsy) : *(cont.)*

TREATMENT:

Presuppurative stage:

1. Bed rest.
2. Antibiotics & analgesics.
3. Soft nutritious diet.

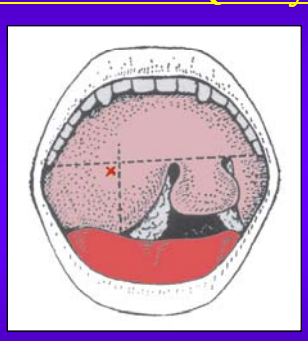
Suppurative stage:

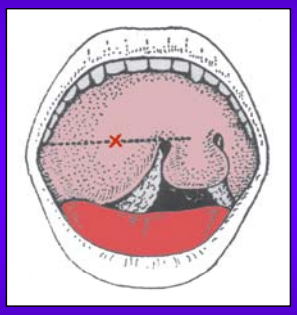
1. Incision & drainage (Intraoral – under LOCAL anesthesia).
2. General antibiotics.
3. Tonsillectomy (one month later – to prevent recurrence).

Emad A. Magdy, M.D.

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.

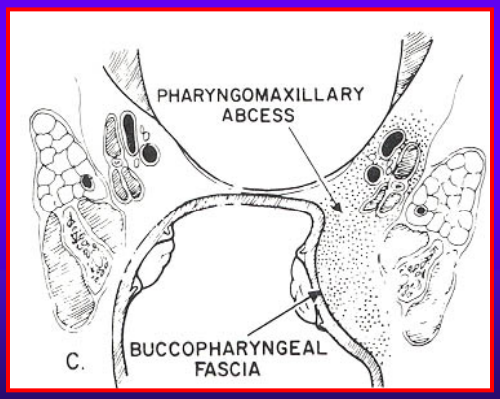
Emad A. Magdy, M.D.

Parapharyngeal Abscess

Emad A. Magdy, M.D.

Parapharyngeal Abscess :

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



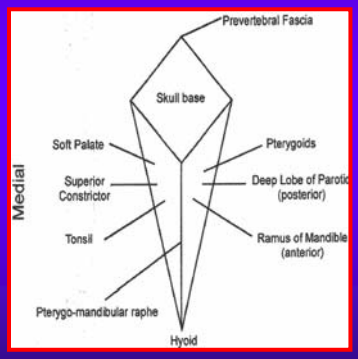
Emad A. Magdy, M.D.

Parapharyngeal Abscess : *(cont.)*

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
- Lateral : Superficial layer of deep cervical fascia overlying: mandible – deep lobe of parotid – pterygoid ms.

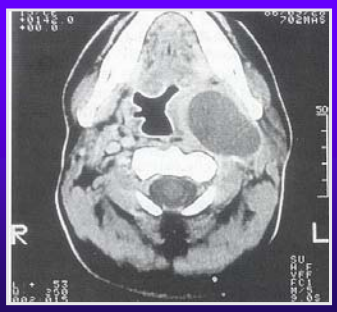


Emad A. Magdy, M.D.

Parapharyngeal Abscess : *(cont.)*

ETIOLOGY :

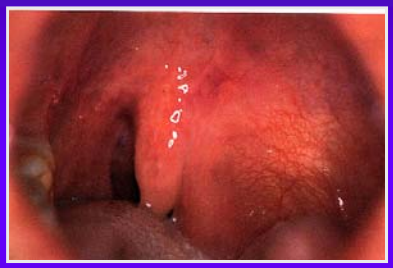
1. Spread of infection from tonsils or quinsy.
2. Odontogenic infections (e.g. extraction of 3rd molar tooth).
3. Middle ear infections with bony destruction of mastoid tip (*Bezold's abscess*).



Emad A. Magdy, M.D.

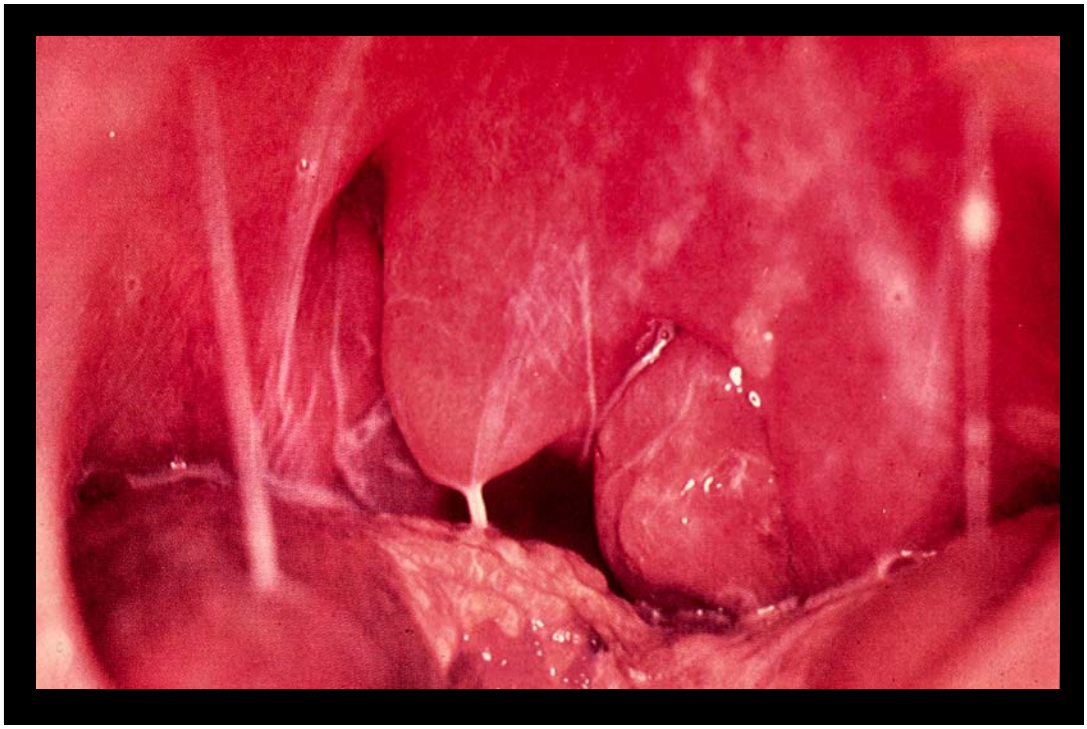
Parapharyngeal Abscess : *(cont.)*

CLINICAL FEATURES :



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

Emad A. Magdy, M.D.



Parapharyngeal Abscess : *(cont.)*

COMPLICATIONS :

1. IJV thrombosis *(Lemierre's syndrome)*.
2. Rupture of carotid artery.
3. Neurological sequelae dt. 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.)

Emad A. Magdy, M.D.

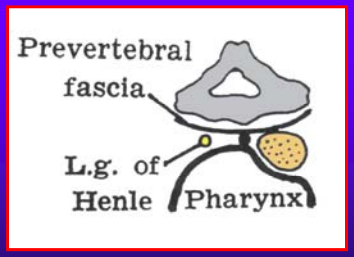
Retropharyngeal Abscesses

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

Emad A. Magdy, M.D.

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.



Emad A. Magdy, M.D.

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.

Emad A. Magdy, M.D.

Acute retropharyngeal abscess : *(cont.)*

CLINICAL FEATURES:

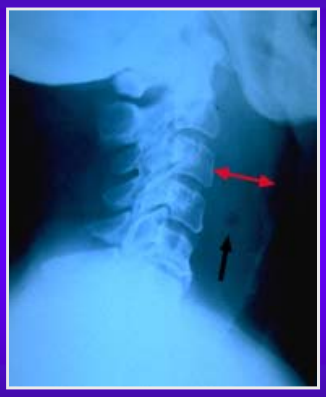
- Fever with difficulty in suckling & breathing.
- Nuchal rigidity with tilting of head toward *uninvolved side*.
- Pharyngeal congestion with smooth swelling on ONE side of the post. pharyngeal wall *(dt. adherence of buccopharyngeal & prevertebral fasciae in the midline)*.

Emad A. Magdy, M.D.

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.

Emad A. Magdy, M.D.

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).*

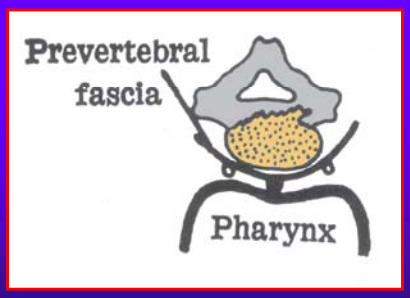
TREATMENT:

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).

Emad A. Magdy, M.D.

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.



Emad A. Magdy, M.D.

Chronic retropharyngeal abscess : *(cont.)*

CLINICAL FEATURES:

Symptoms:

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

Signs:

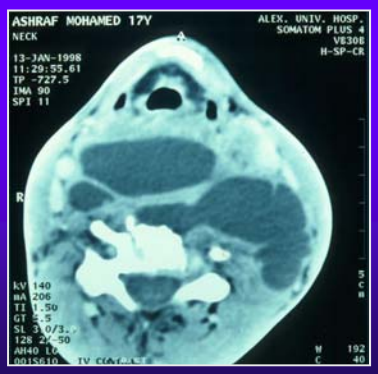
- Normal Temp. & pulse.
- Tenderness along vertebrae.
- Enlarged painless cervical LNs.
- Midline cystic swelling on post. pharyngeal wall.

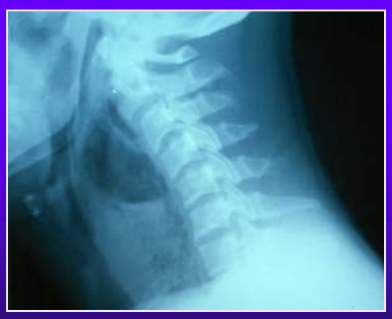
Emad A. Magdy, M.D.

Chronic retropharyngeal abscess : *(cont.)*

INVESTIGATIONS:

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





Emad A. Magdy, M.D.

Chronic retropharyngeal abscess : *(cont.)*

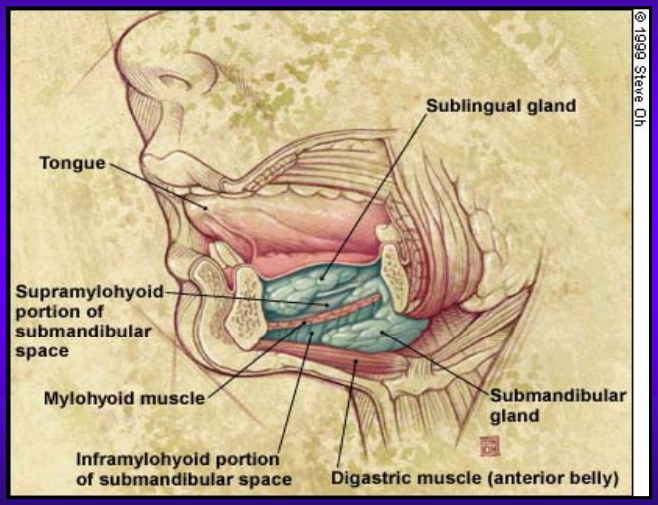
TREATMENT:

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.

Emad A. Magdy, M.D.

Ludwig's Angina

Ludwig's angina :



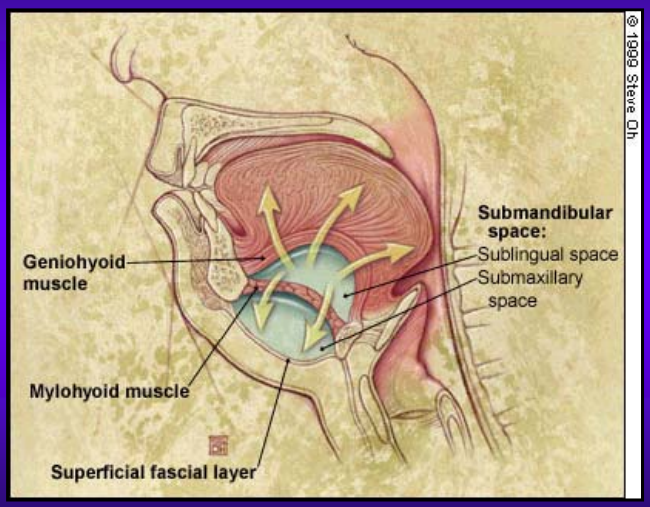
Emad A. Magdy, M.D.

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.

Emad A. Magdy, M.D.

Ludwig's angina : *(cont.)*

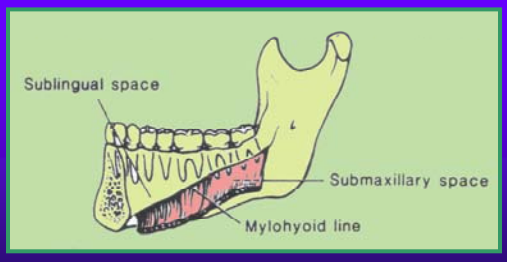


Emad A. Magdy, M.D.

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.



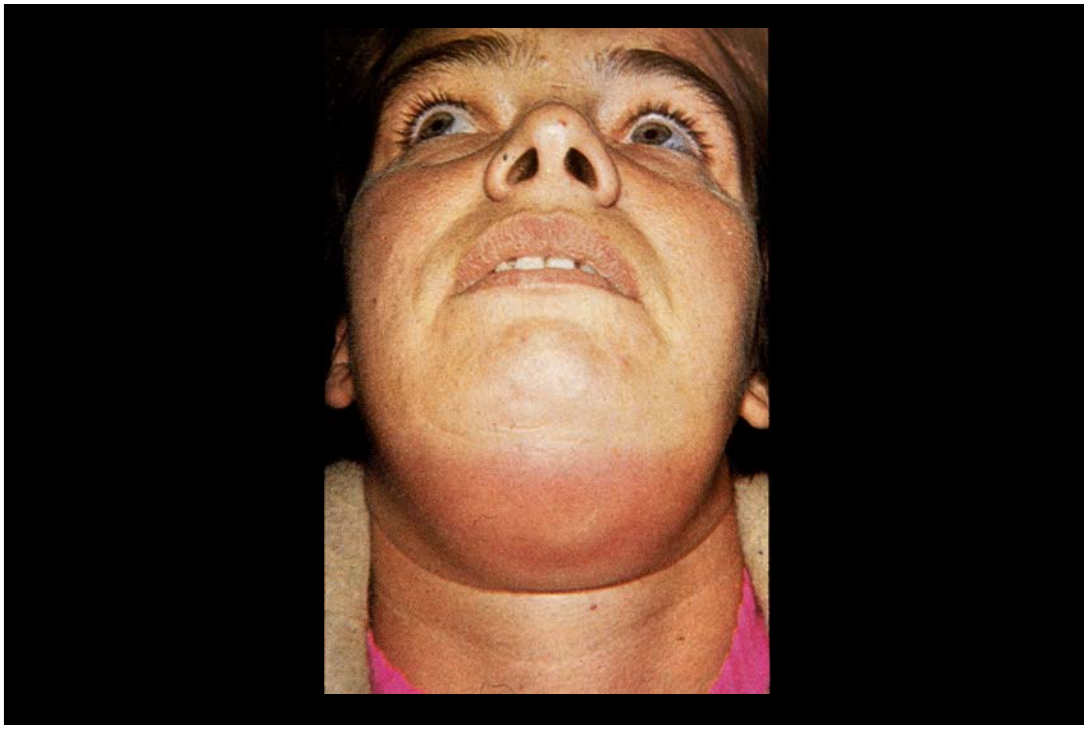
Emad A. Magdy, M.D.

Ludwig's angina : *(cont.)*

CLINICAL FEATURES:

- Young pt. with *poor dentition*.
- Unilateral *neck pain* & *swelling* that soon becomes *bilateral*.
- Increasing *oedema* & *brawny induration* of suprahyoid 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.

Emad A. Magdy, M.D.

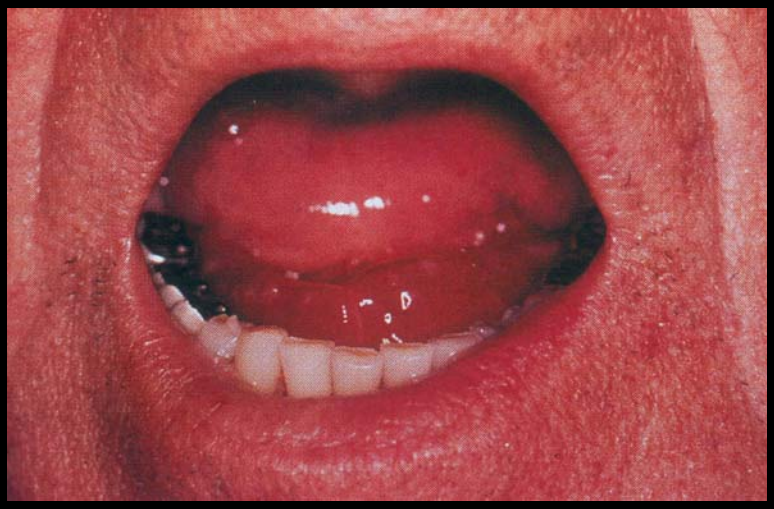


Ludwig's angina : *(cont.)*

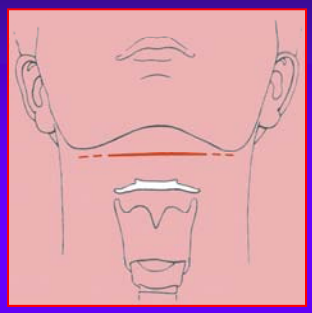
CLINICAL FEATURES:

- Young pt. with *poor dentition*.
- Unilateral *neck pain* & *swelling* that soon becomes *bilateral*.
- Increasing *oedema* & *brawny induration* of suprahyoid 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.

Emad A. Magdy, M.D.



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.

Emad A. Magdy, M.D.


THANK YOU ..
Emad A. Magdy, M.D.