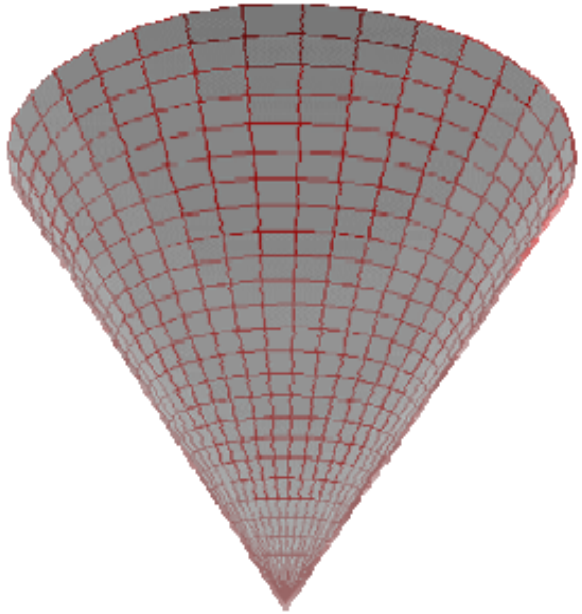
The parapharyngeal space (PPS)

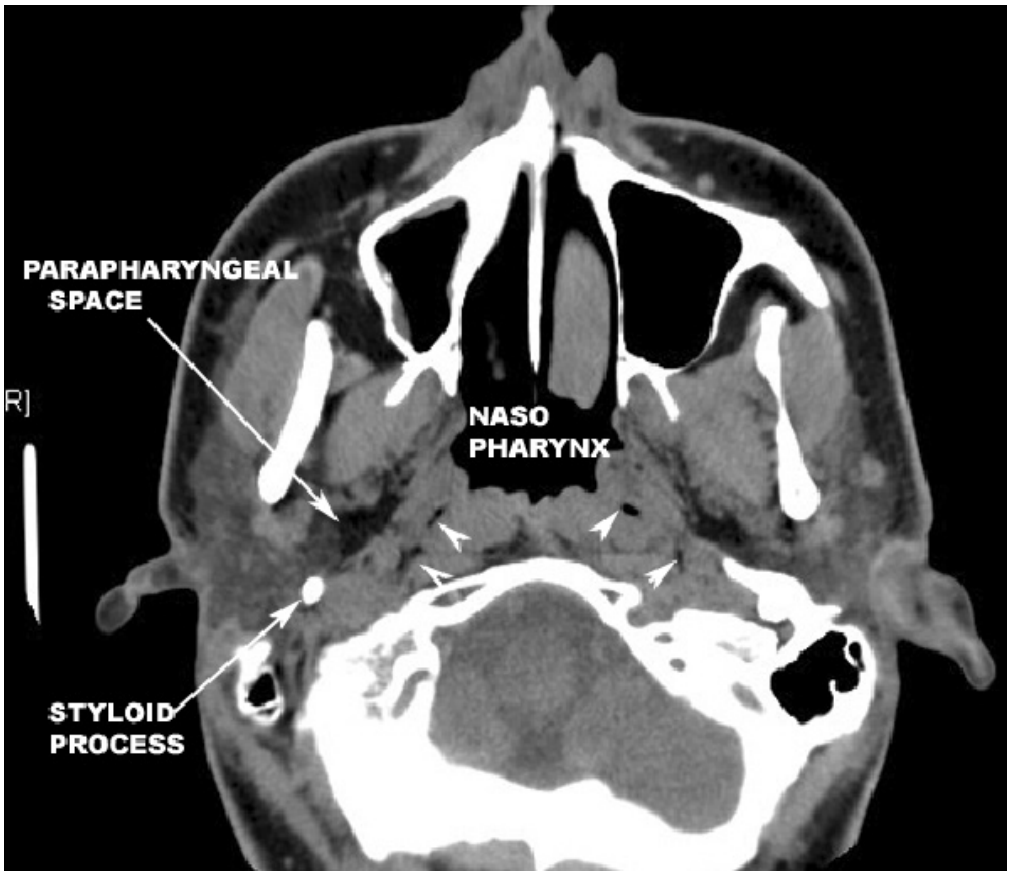
- Cone shaped
  - Base at temporal bone
  - Apex at the hyoid bone



- Between
  - Pharyngeal
  - Lat + med pterygoid muscles

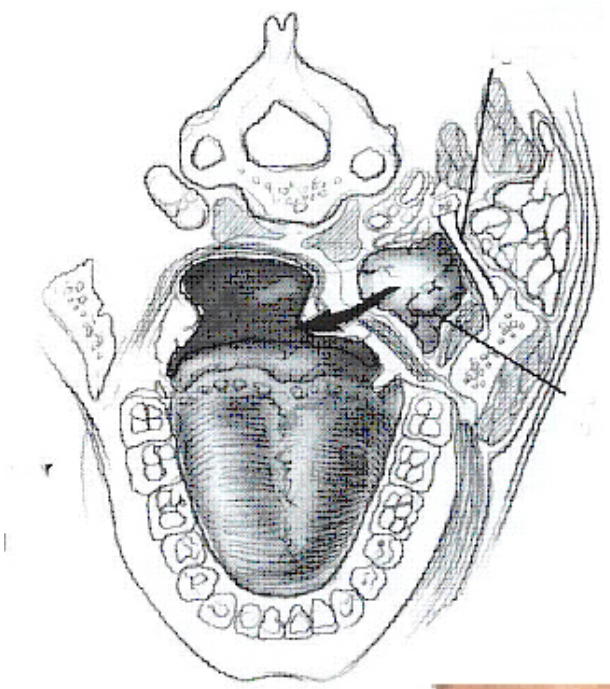
Contents

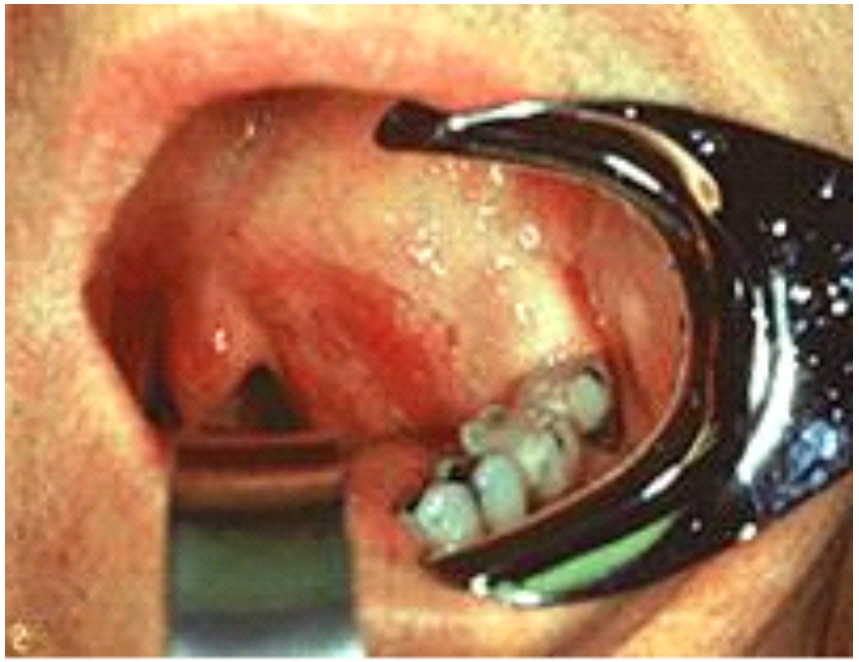
- Loose fibrofatty tissues
- Carotid artery
- Internal jugular vein
- Cranial nerves IX, X, XI, and XII;
- Cervical sympathetic chain
- Lymph nodes
  - Nasal cavity, paranasal sinuses
  - Nasopharynx and oropharynx,
  - Mastoid tip

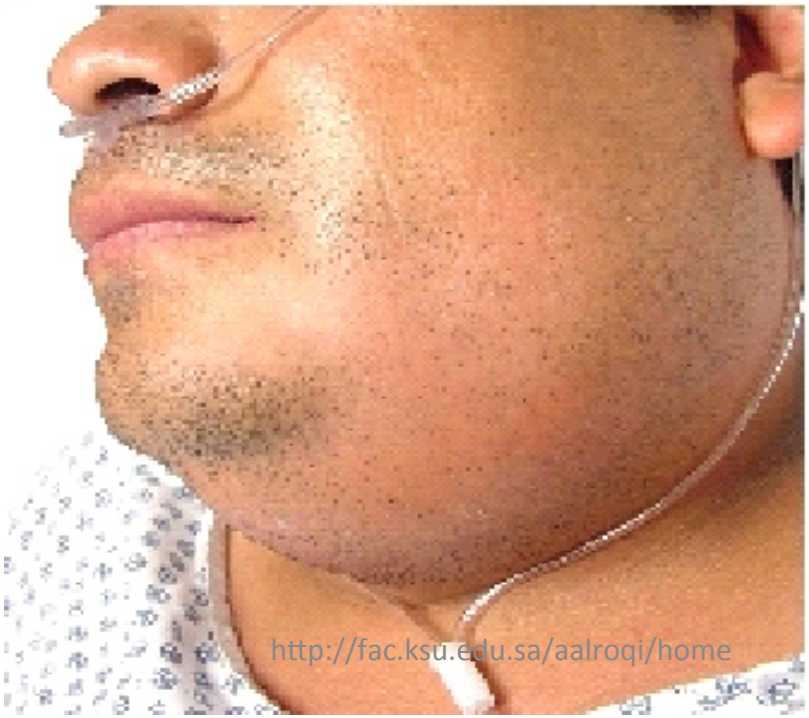

PARAPHARYNGEAL
SPACE
NASO
PHARYNX
STYLOID
PROCESS

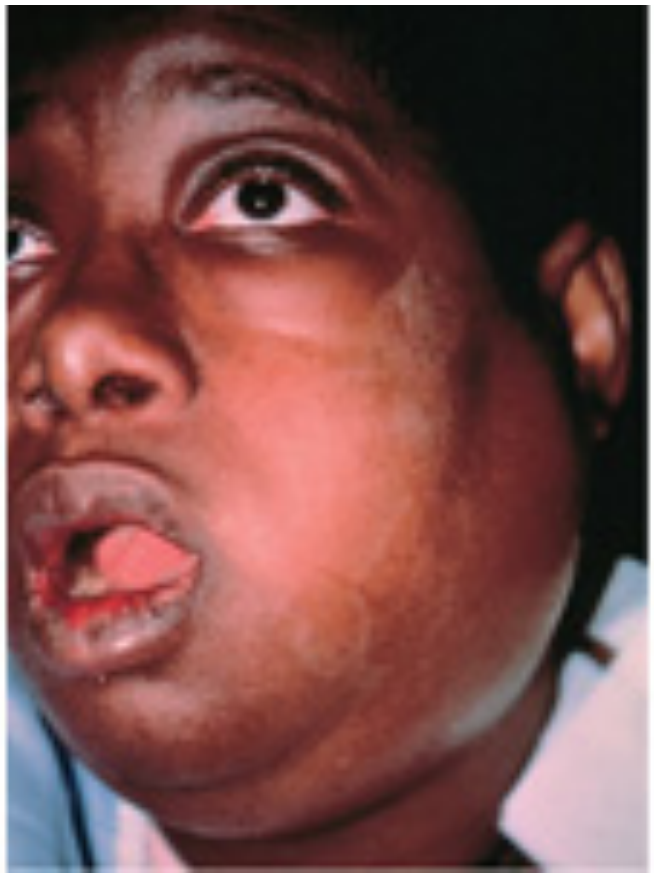
Clinical features of parapharyngeal abscess

- Systemic manifestations
- Pain, trismus, swelling







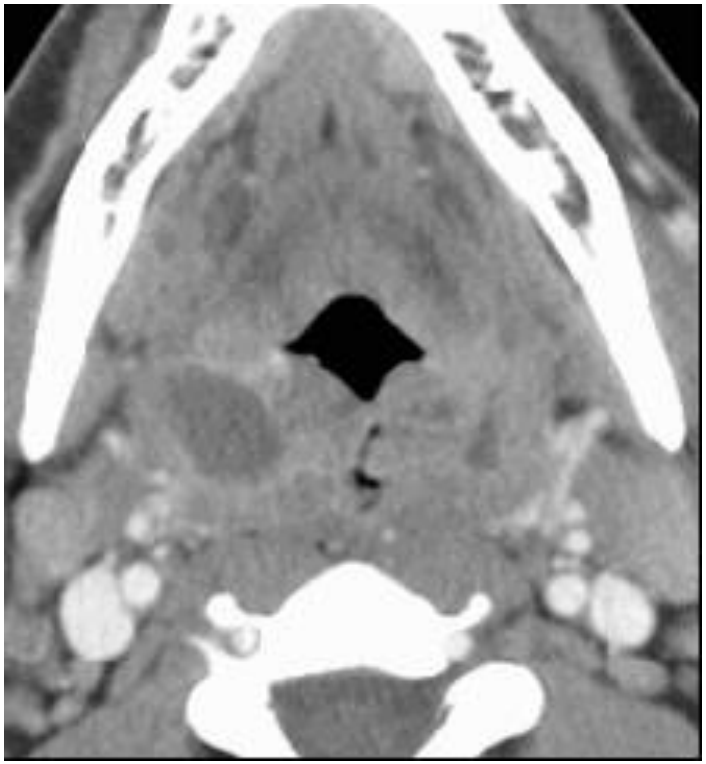


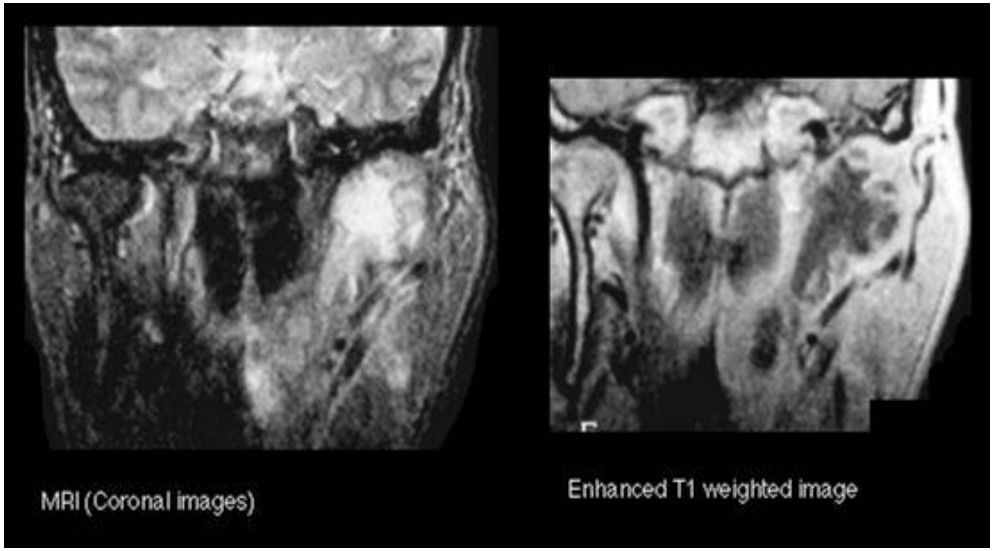
CLINICAL FEATURES

- Systemic manifestations
- Pain, trismus, swelling

INVESTIGATION

- Laboratory and bacteriology
- CT
- MRI





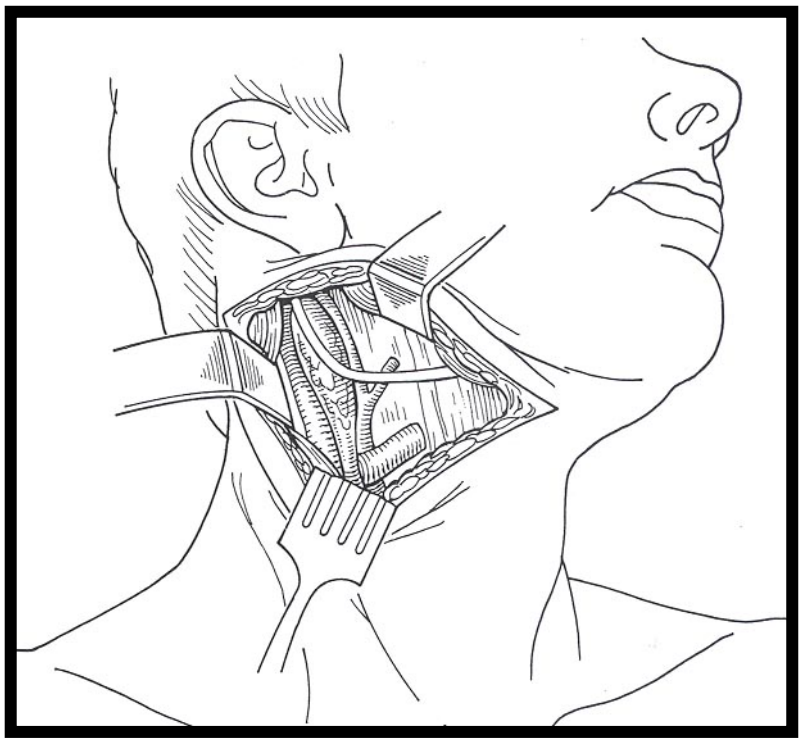
PRINCIPLES OF TREATMENT

- Secure the airway
- Antimicrobial therapy
- Surgical drainage

DRAINAGE OF PARAPHARYNGEAL ABSCESS

- External cervical incision
- In order to avoid injury to

  the great vessels



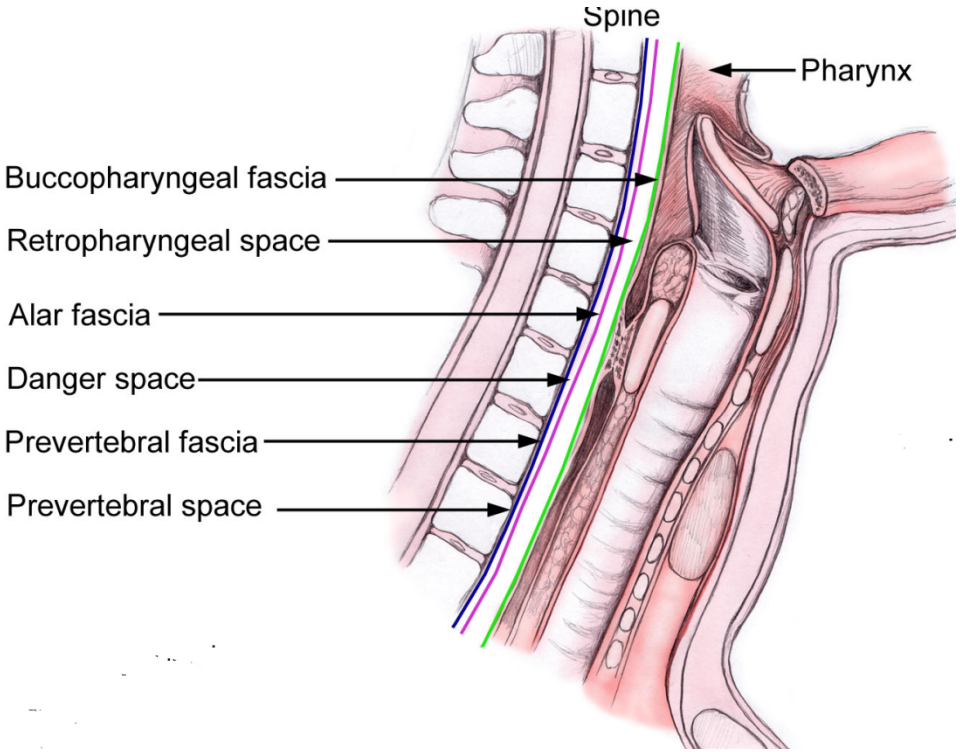
COMPLICATIONS OF ACUTE TONSILLITIS

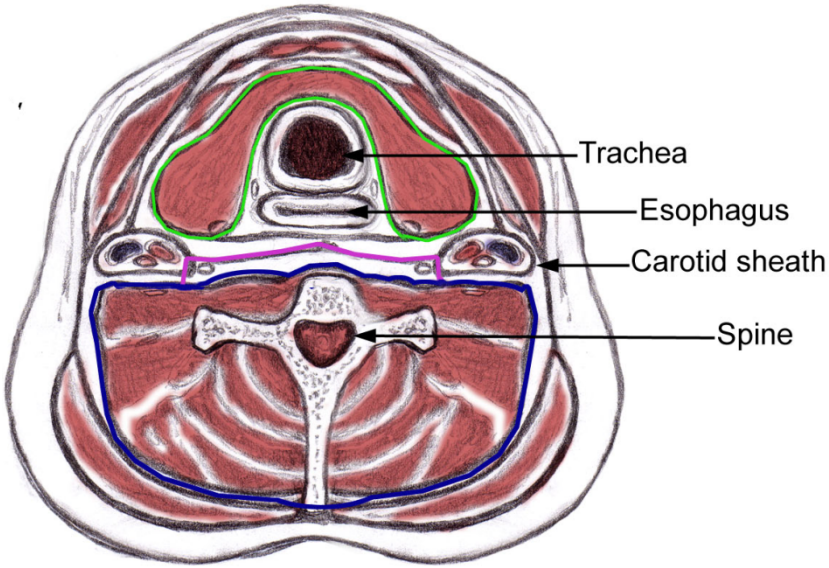
- General:
  - Acute rheumatism
  - Acute glomerulonephritis
  - Septicaemia
- Local:
  - Peritonsillitis & peritnosillar abscess (Quinsy)
  - Neck Abscess
  - Parapharyngeal abscess
  - **Retropharyngeal abscess**

Retropharyngeal space

- Between
  - Prevertebral fascia
  - Posterior pharyngeal wall and esophagus fascia
- From
  - Skull base
  - Tracheal bifurcation
- Major route → mediastinum.

Anatomy of retropharyngeal space



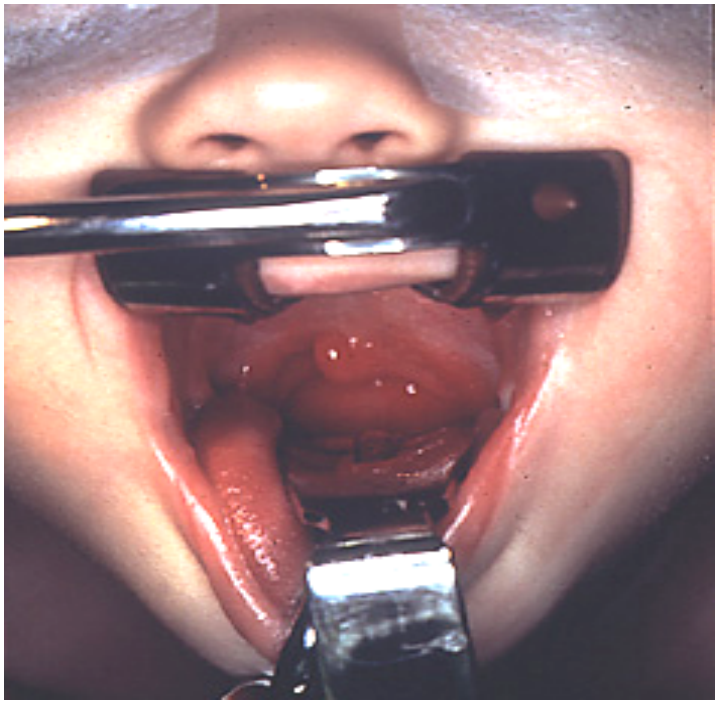


ACUTE RETROPHARYNGEAL ABSCESS

- Due to suppuration of the retropharyngeal lymph nodes present in the retrophayngeal space

CLINICAL FEATURES

- Systemic manifestations
- Respiratory obstruction
- Odynophagia & Dysphagia
- Swelling of posterior pharyngeal wall (usually unilateral)

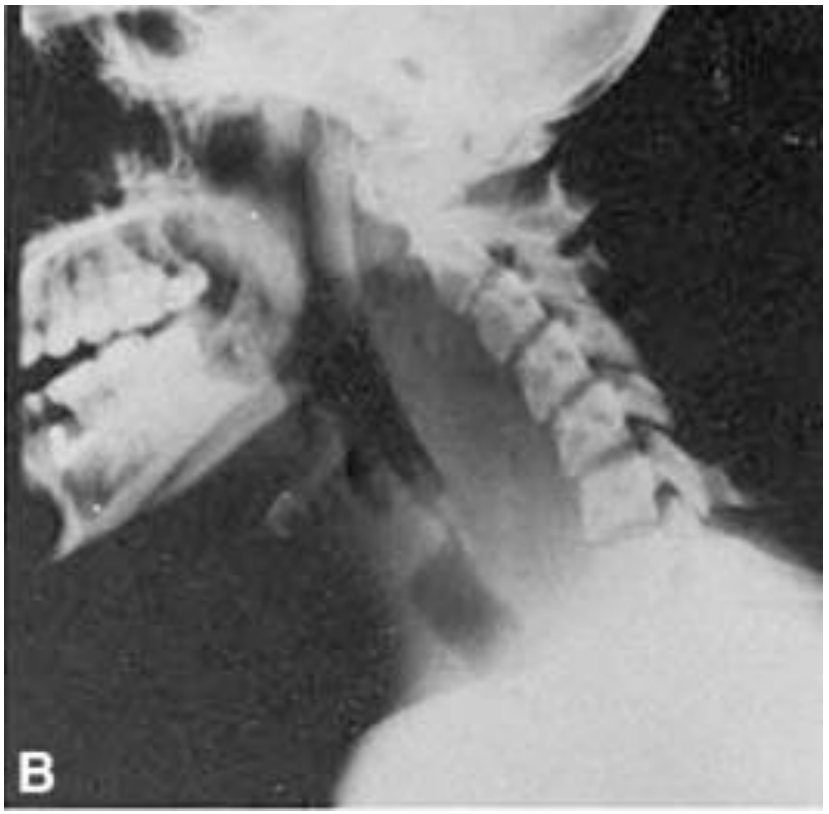


INVESTIGATION

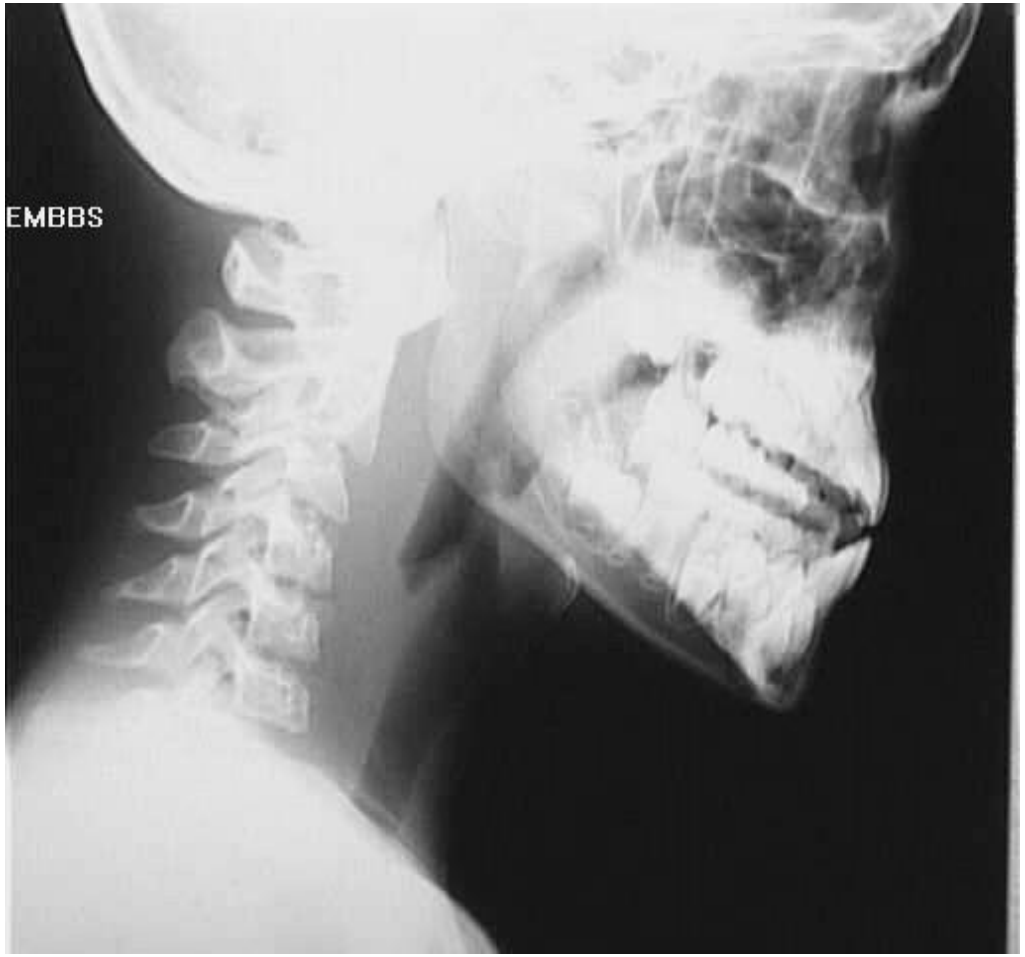
- Laboratory and bacteriology
- Plain X-rays

PLAIN X-RAYS

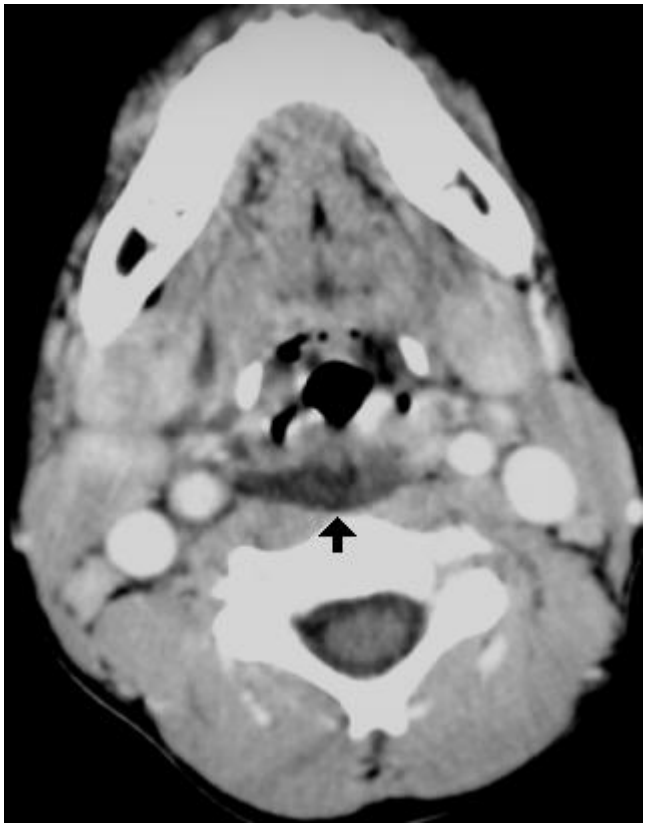
Normal



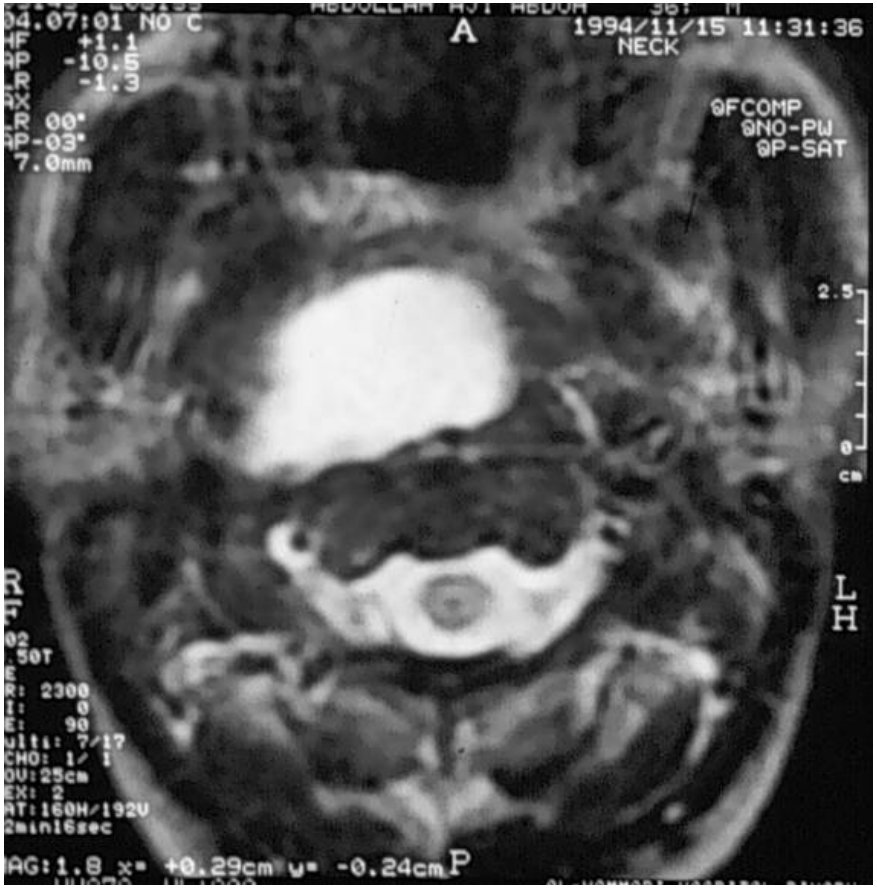
Retropharyngeal abscess


EMBBS

CT

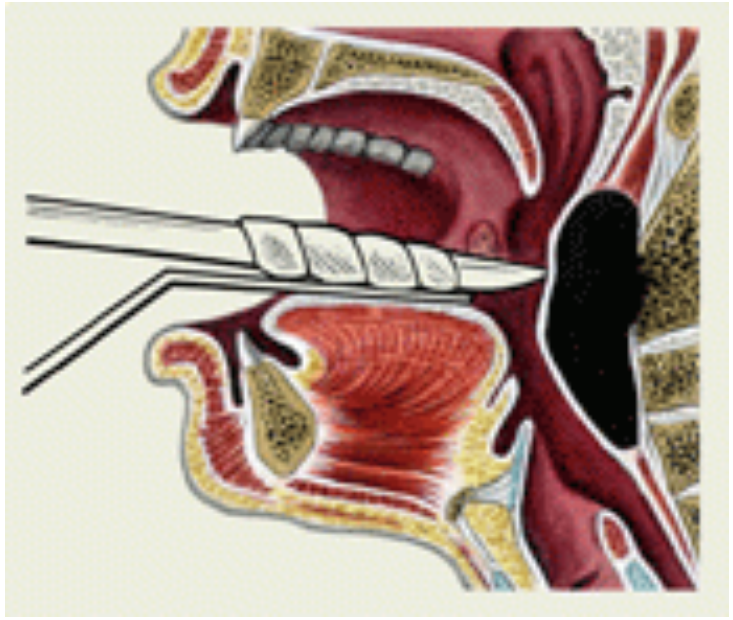


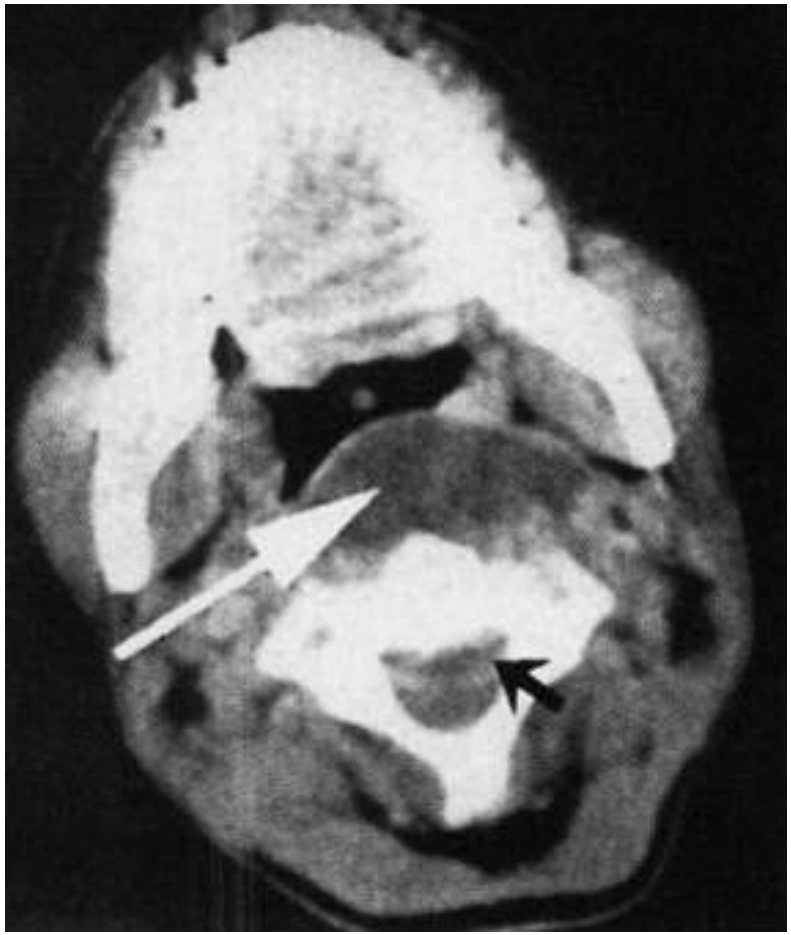
MRI

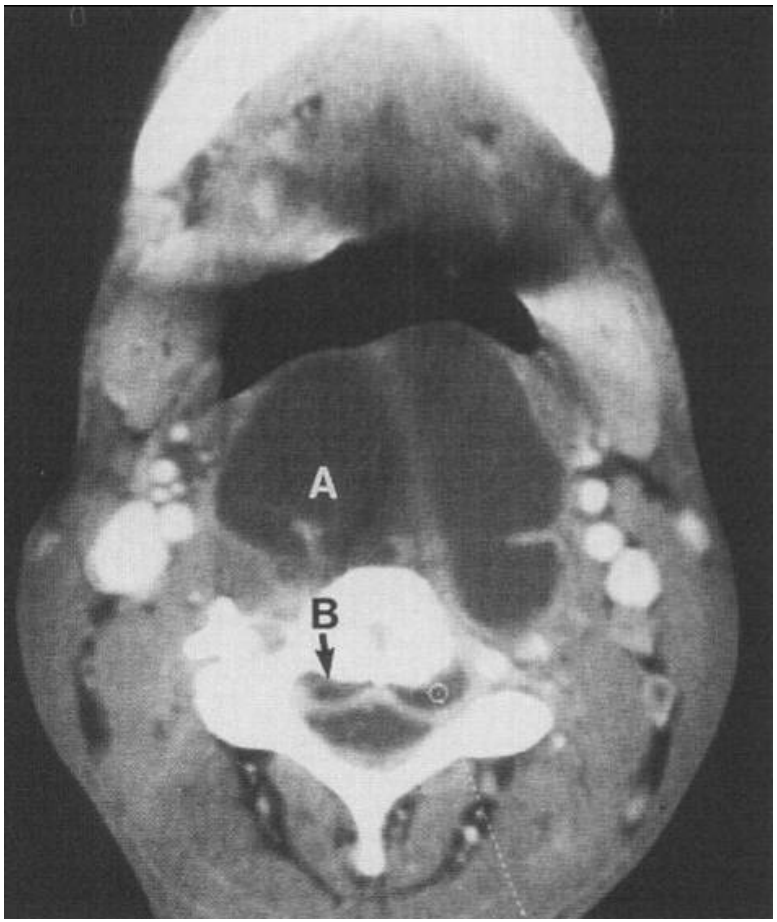

A
1994/11/15 11:31:36
NECK
9FCOMP
9NO-PW
9P-SAT
7.0mm
2.5
0
cm
L
H
AG:1.8 x= +0.29cm y= -0.24cm P

TREATMENT OF ACUTE RETROPHAYNGEAL ABSCESS

- Secure airway
- Antimicrobial
- Surgical drainage
  - Trans oral

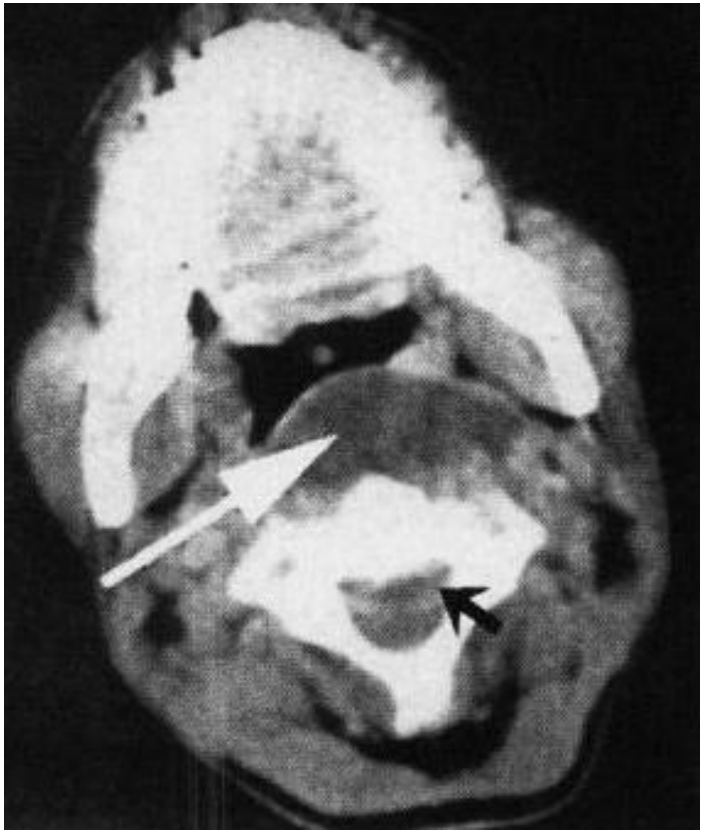





A
B

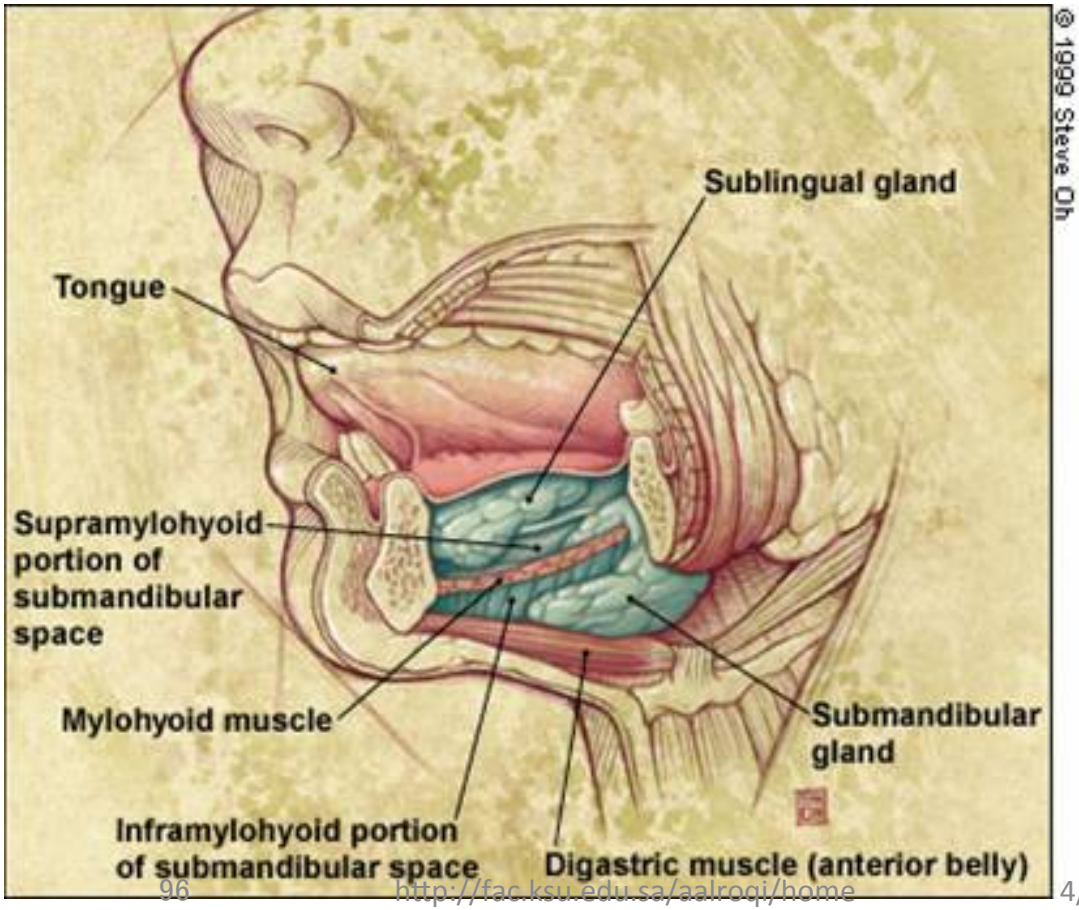
CHRONIC RETROPHARYNGEAL ABSCESS

- Tuberculous (cold abscess)
- Usually due to TB spines but may be secondary to TB lymphadentis
- Symptoms are insidious
- Treatment is by anti tuberculous medication, repeated aspiration and external drainage



Ludwig's Angina

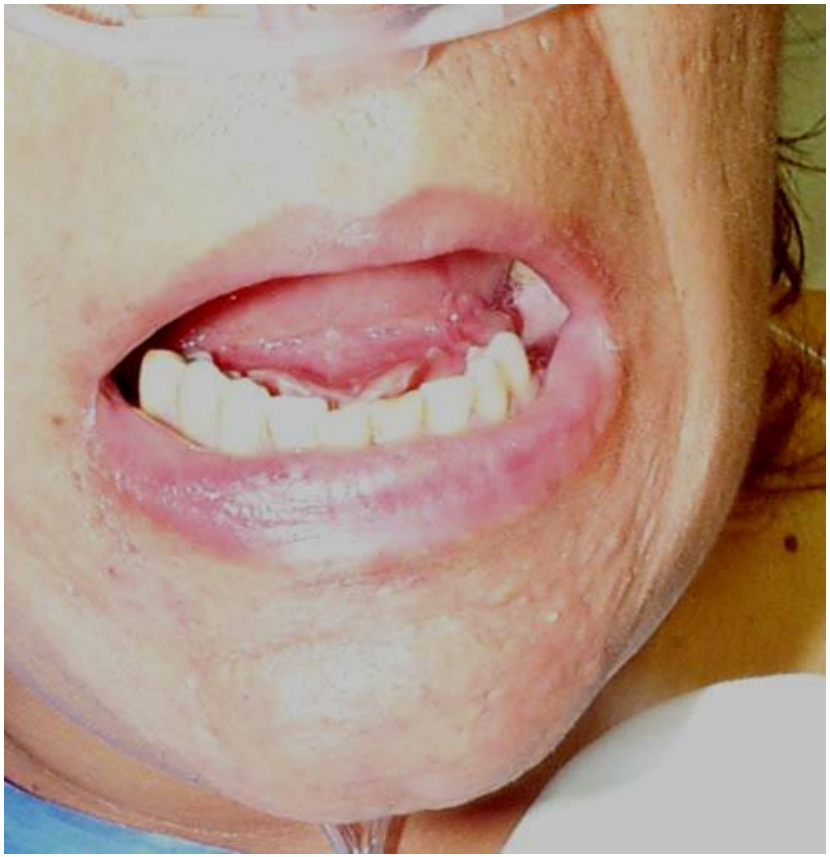
- Infection of the submandibular space

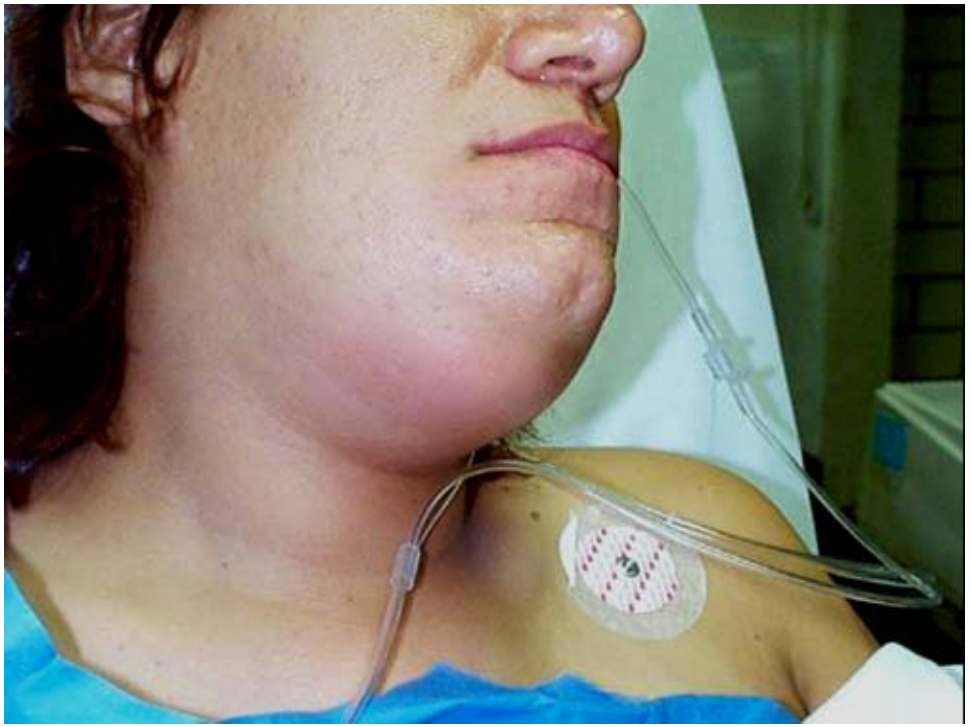


Causes of Ludwig's Angina

- Usually secondary to dental infection or trauma

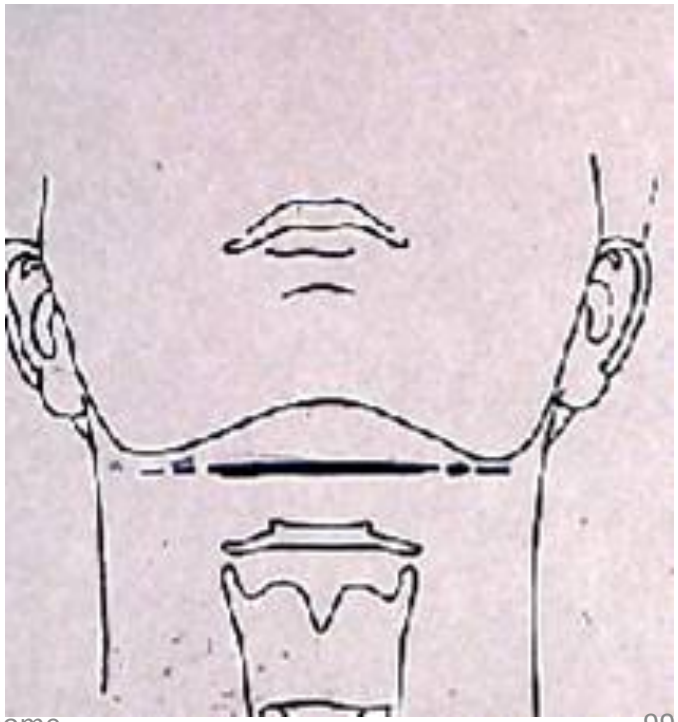
Presentation of Ludwig's Angina





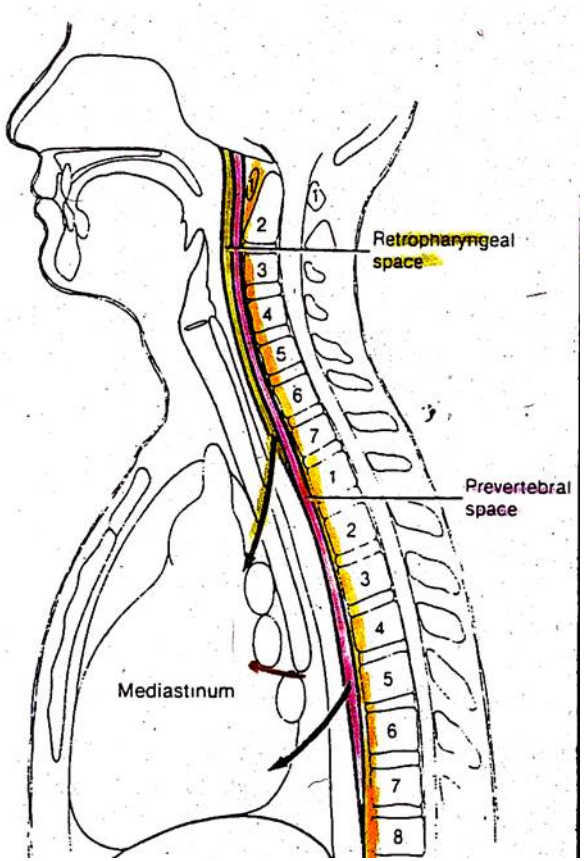
TREATMENT

- Secure airway
- Most cases respond to antibiotics
- Drainage may be needed



Complications of neck spaces infections

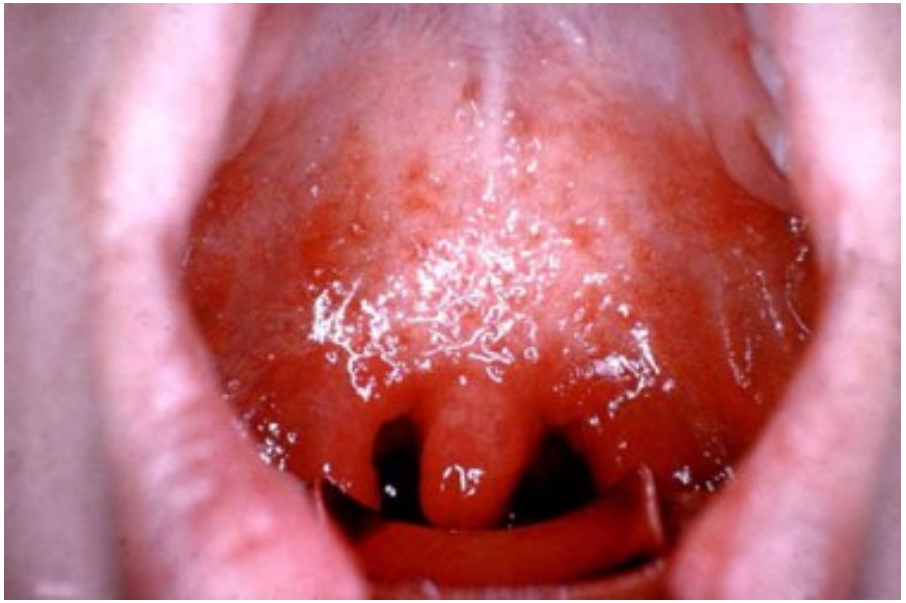
- Respiratory obstruction
- Spontaneous rupture (inhalation pneumonia
- Extension of infection
  - Other spaces
  - Carotid & internal jugular
  - Mediastinitis

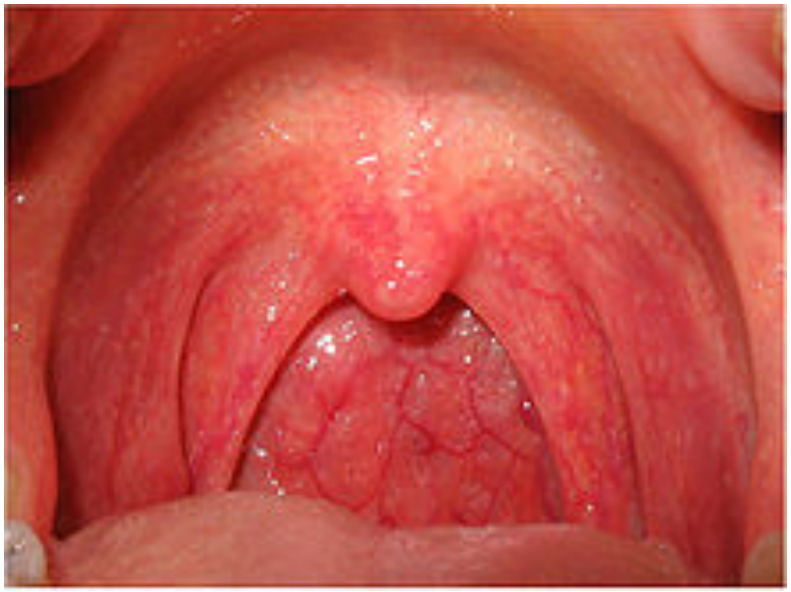


ACUTE INFECTIONS OF THE OROPHARYNX

- Acute tonsillitis
- Acute non-specific pharyngitis
- Acute diphtheria
- Infectious mononueuclosis
- Vincent's Angina
- Scarlet fever
- Moniliasis

ACUTE NONSPECIFIC PHARYNGITIS





ACUTE INFECTIONS OF THE OROPHARYNX

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- Vincent's Angina
- Scarlet fever
- Moniliasis

ACUTE DIPHTHERITIC PHARYNGITIS

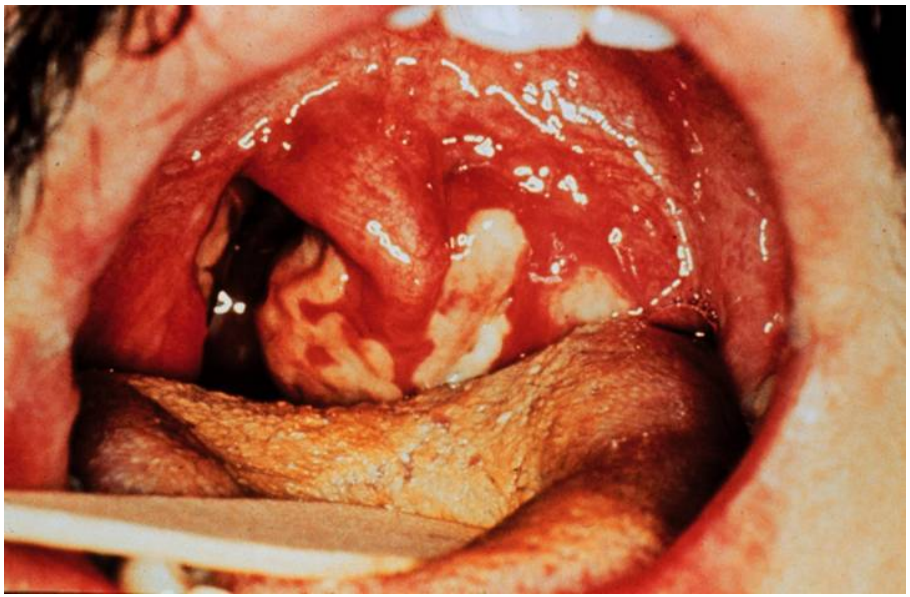
- A severe infection caused by *Corynebacterium diphtheriae*
- Affect children at age 2-5 years
- Spread by droplets or contaminated articles
- The incidence has fallen markedly because of immunization

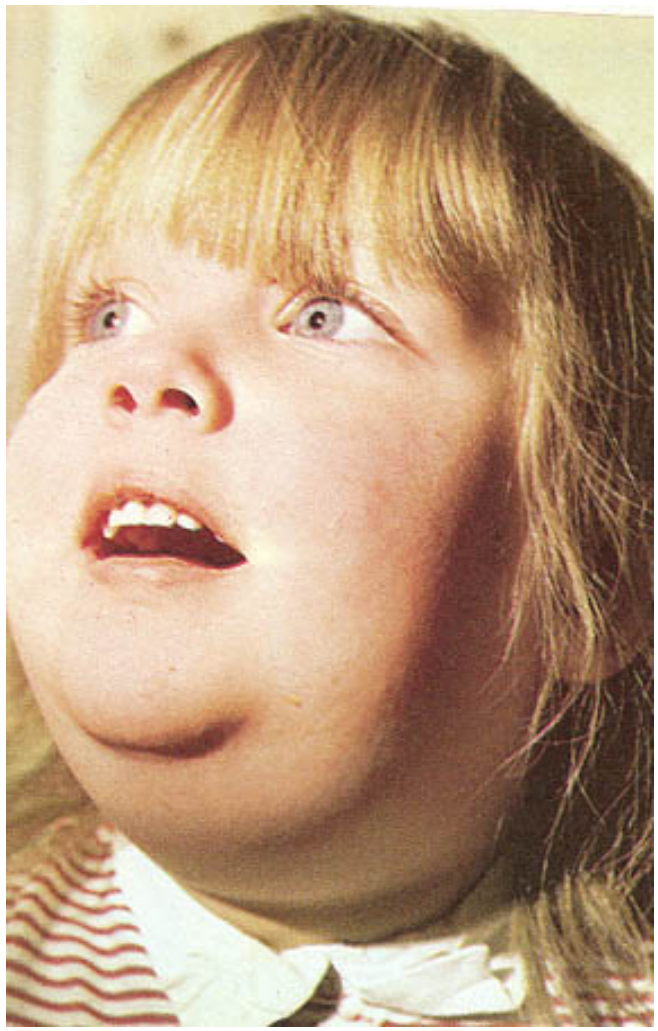
PATHOLOGY

- Local grayish membrane (composed of fibrin, leukocytes, and cellular debris)
- Exotoxins travels to heart and nervous system

CLINICAL MANIFESTATIONS

- Systemic symptoms due to the exotoxins
  - Toxemia
  - Mild fever
  - Tachycardia
  - Paralysis
- Local manifestations
  - Sore throat
  - Membrane
  - Marked lymphadentitis (‘bull neck’)





DIAGNOSIS

- Isolation of the organism

TREATMENT

- Starts before culture confirmation
  - Airway maintenance
  - Antitoxin
  - Antibiotics (erythromycin, penicillin G, rifampin, or clindamycin)

PREVENTION

- Vaccine

COMPLICATIONS

- Respiratory obstruction
- Heart failure
- Muscular paralysis

ACUTE INFECTIONS OF THE OROPHARYNX

- Acute tonsillitis
- Acute non-specific pharyngitis
- Acute diphtheria
- Infectious mononueclosis
- Vincent's Angina
- Scarlet fever
- Moniliasis

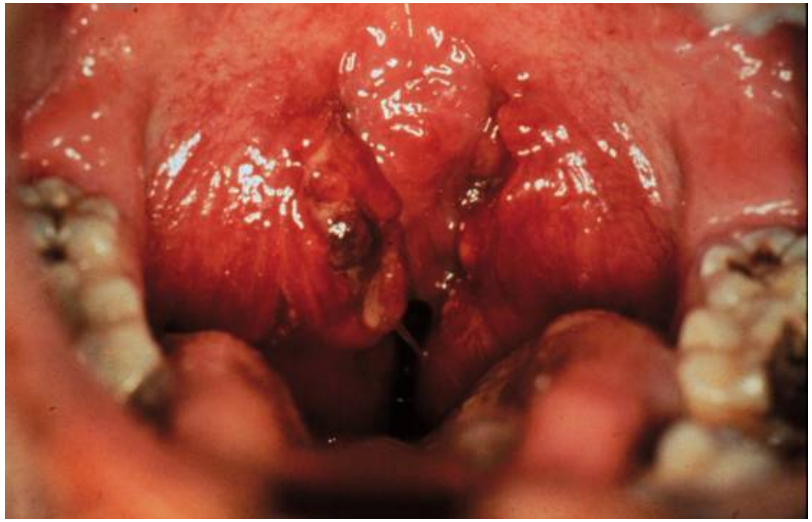
INFECTIOUS MONONUECLOSIS

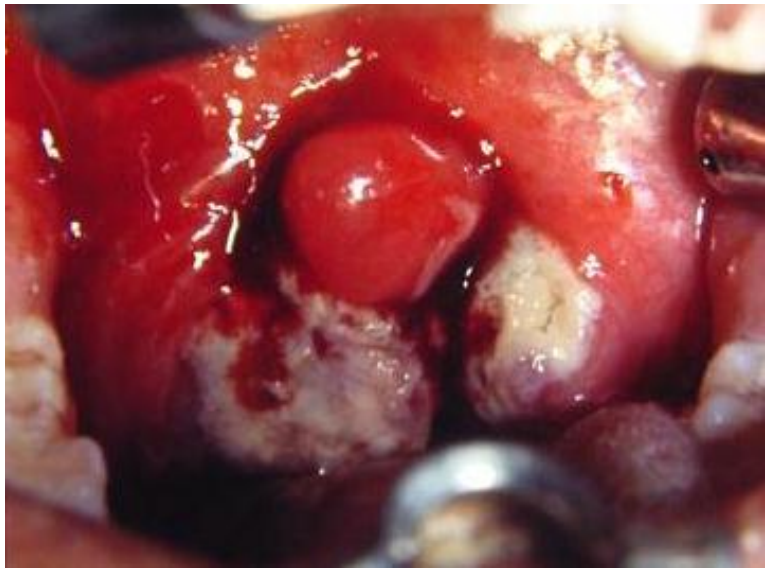
- Systemic infection caused by Epstein-Barr Virus (EBV)
- Selectively infects B-lymphocytes
- Clinical disease is usually seen in young adults

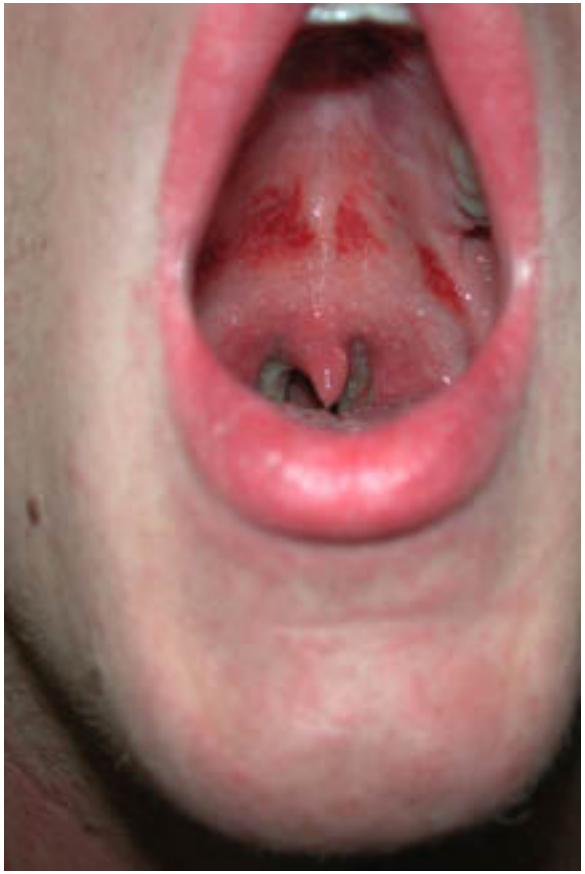
CLINICAL MANIFESTATIONS

- Clinical triad
  - Fever
  - Lymphadenopathy
  - Pharyngitis and/or tonsillitis

INFECTIOUS MONONUCLEOSIS

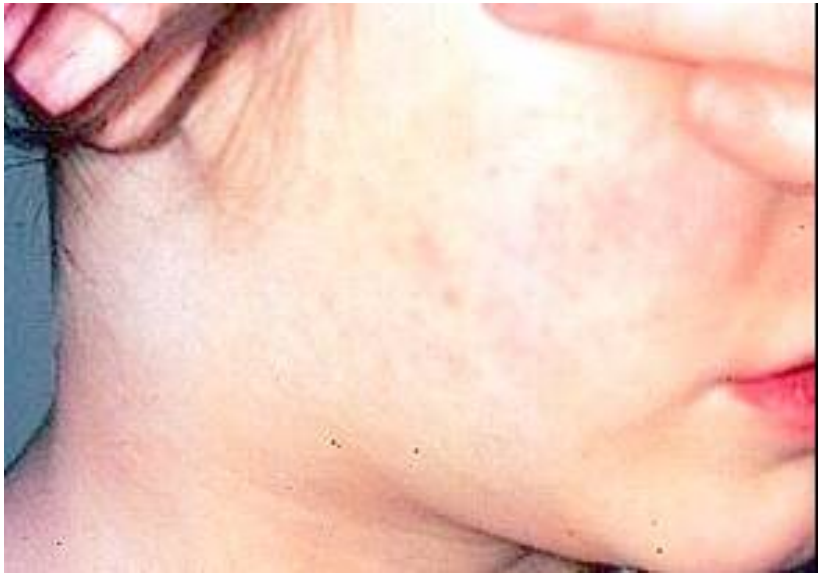






CLINICAL MANIFESTATIONS

- Clinical triad
  - Fever
  - Lymphadenopathy
  - Pharyngitis and/or tonsillitis
- Other clinical findings
  - Splenomegaly – 50%
  - Hepatomegaly – 10%
  - Rash – 5%

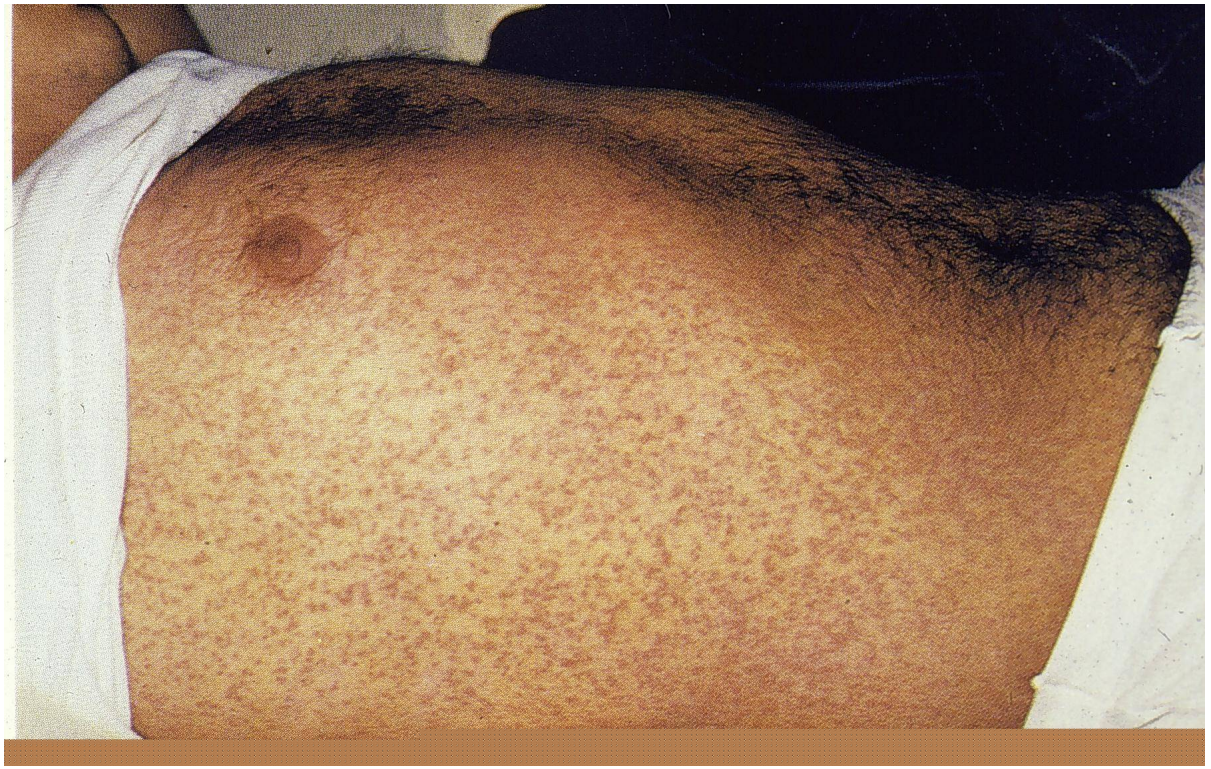


DIAGNOSIS

- CBC with differential (atypical lymphocytes)
- Detection of heterophil antibodies (Paul-Bunnel or Monospot test)

TREATMENT

- Symptomatic & supportive treatment
- Steroids (severe cases)
- Avoid ampicillin



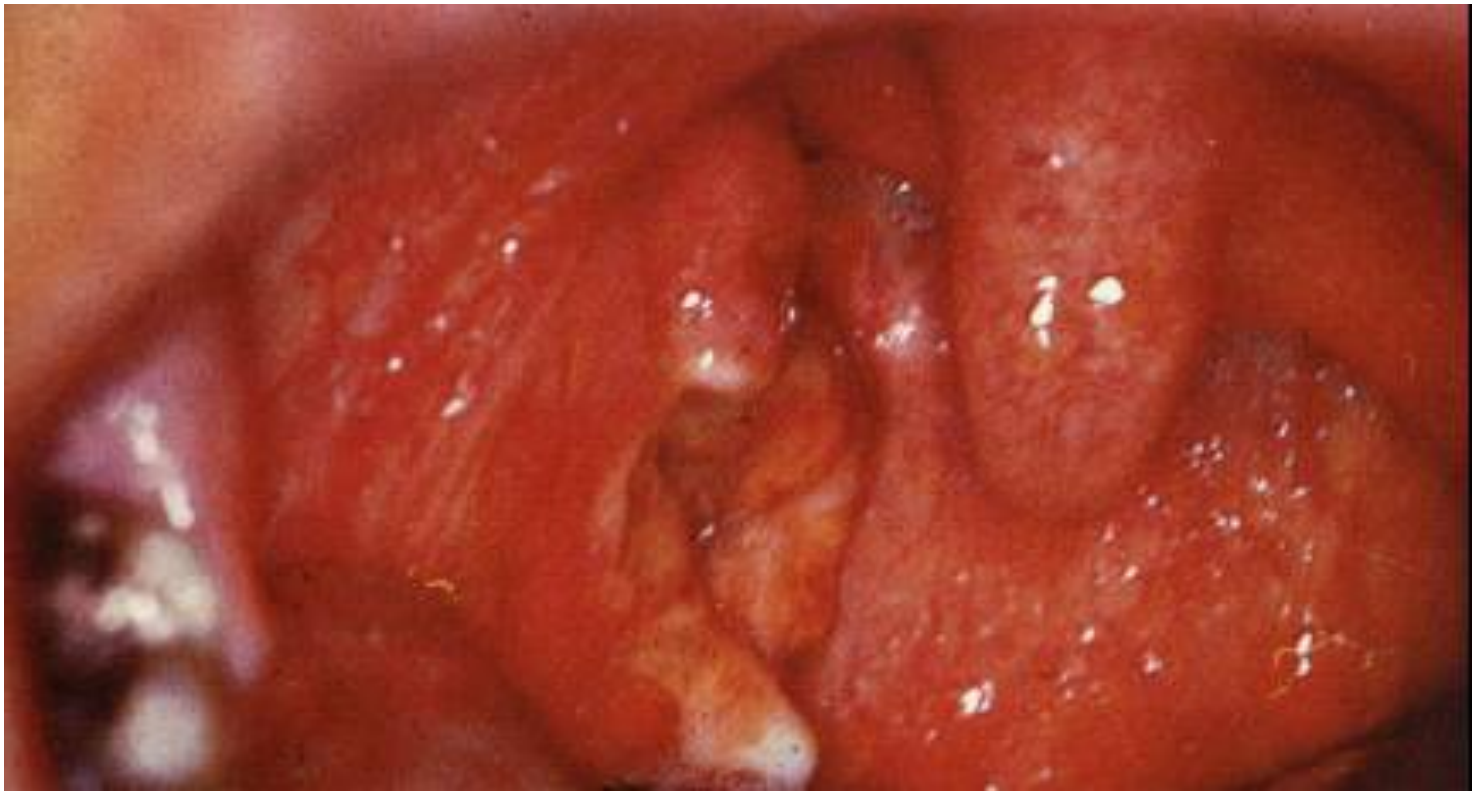
COMPLICATIONS

- Autoimmune hemolytic anemia
- Cranial nerve palsies
- Encephalitis
- Hepatitis
- Pericarditis
- Airway obstruction

VINCENT'S ANGINA

- Subacute infection due to Spirochaeta denticolata and Vincent's fusiform bacillus
- Most commonly in overcrowded conditions "trench fever"
- Mild local and systemic symptoms

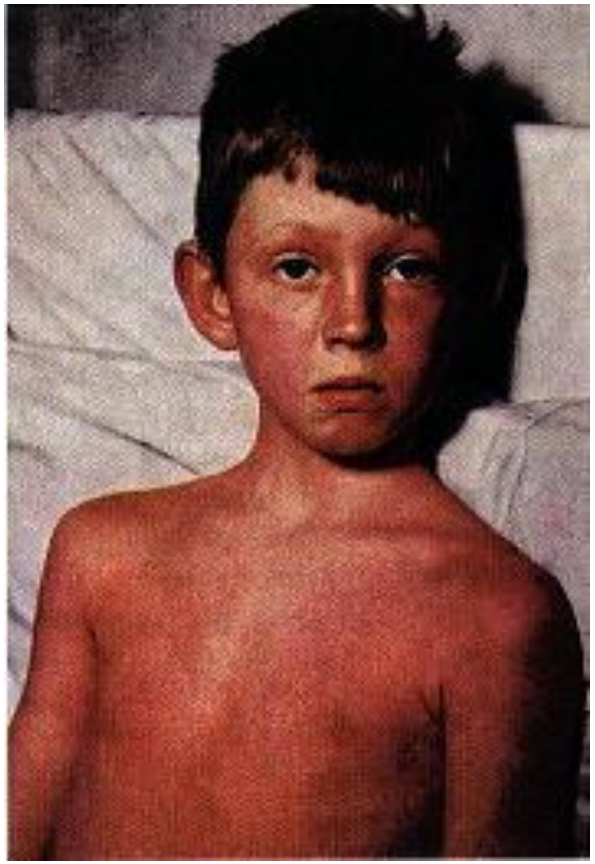
VINCENT’S ANGINA

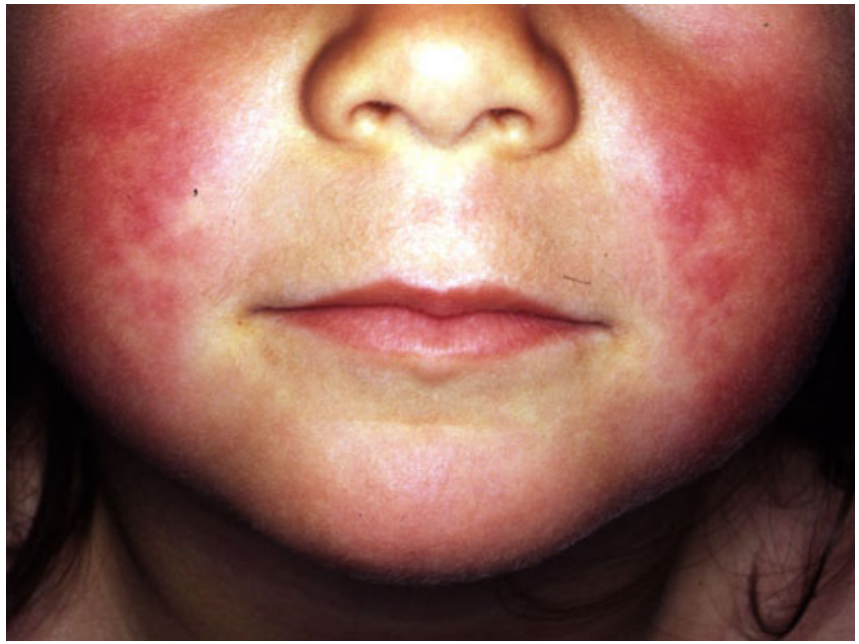


VINCENT'S ANGINA

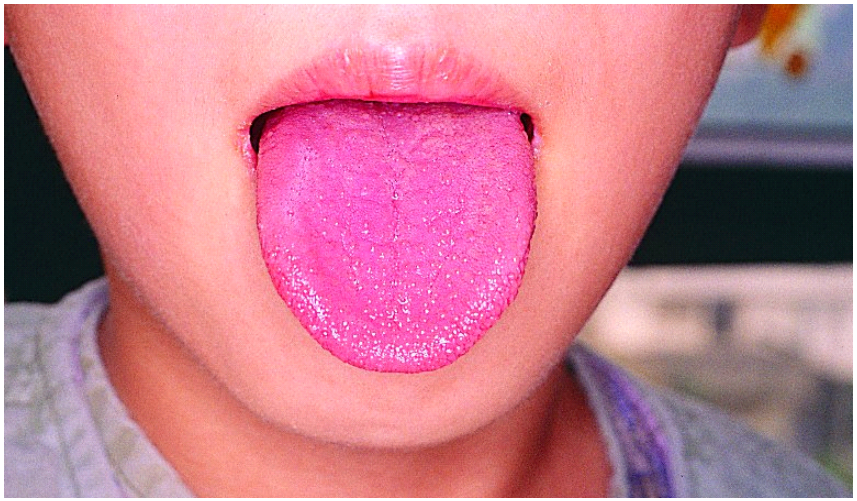
- Subacute infection due to Spirochaeta denticolata and Vincent's fusiform bacillus
- Most commonly in overcrowded conditions "trench fever"
- Mild local and systemic symptoms
- Management is with penicillin and local oral hygiene

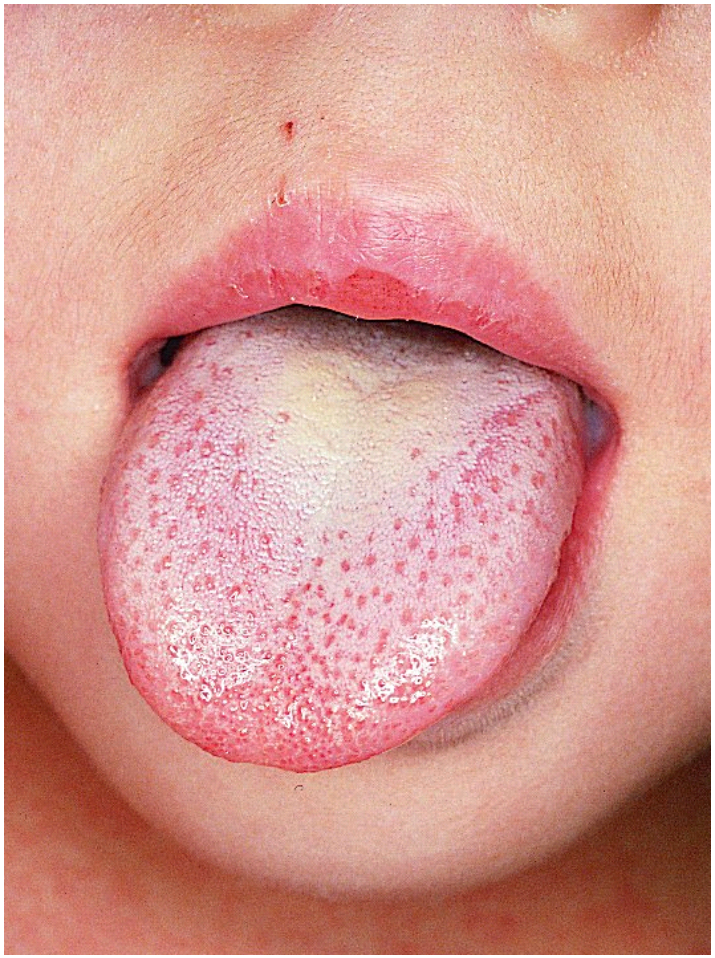
SCARLET FEVER



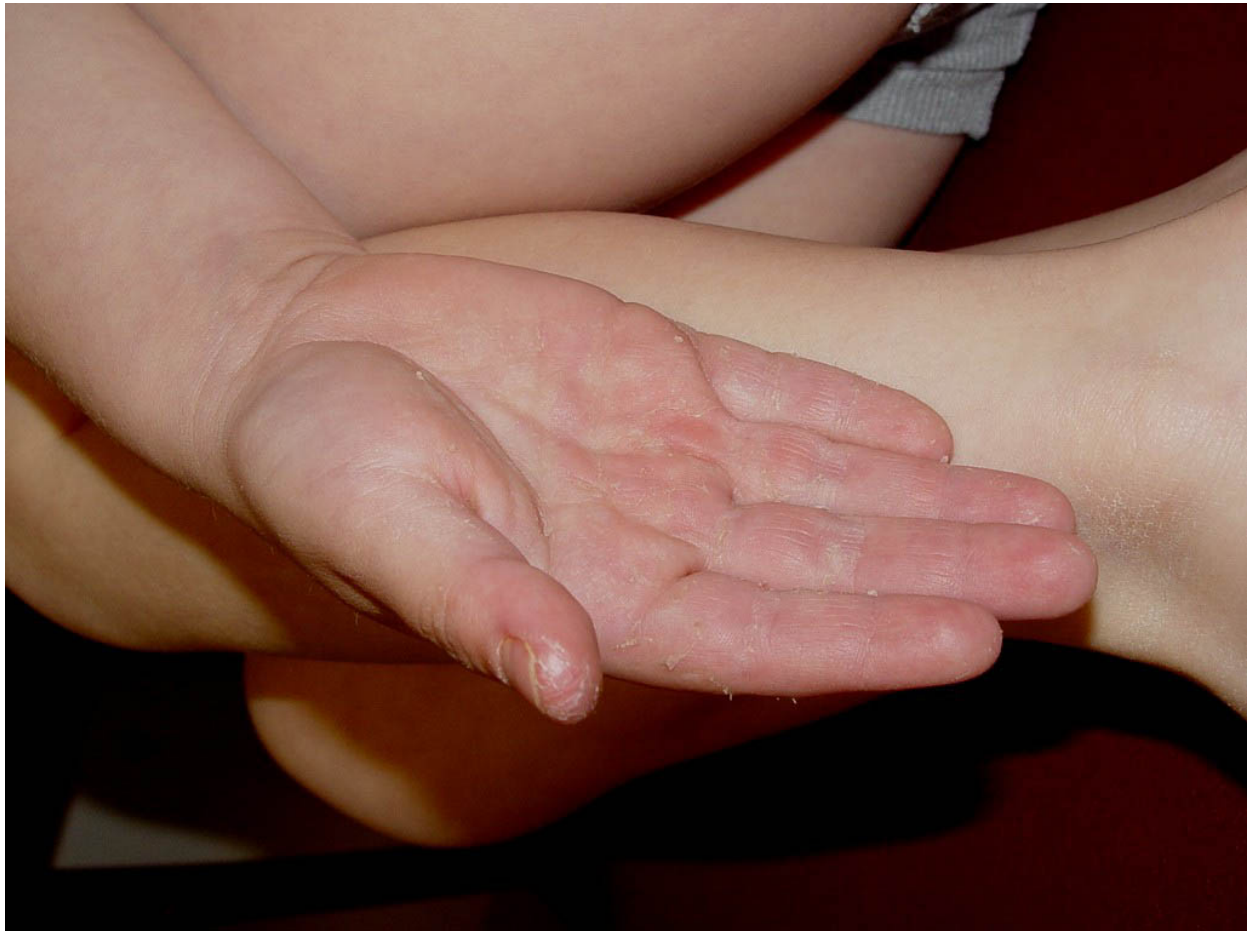


SCARLET FEVER





SCARLET FEVER



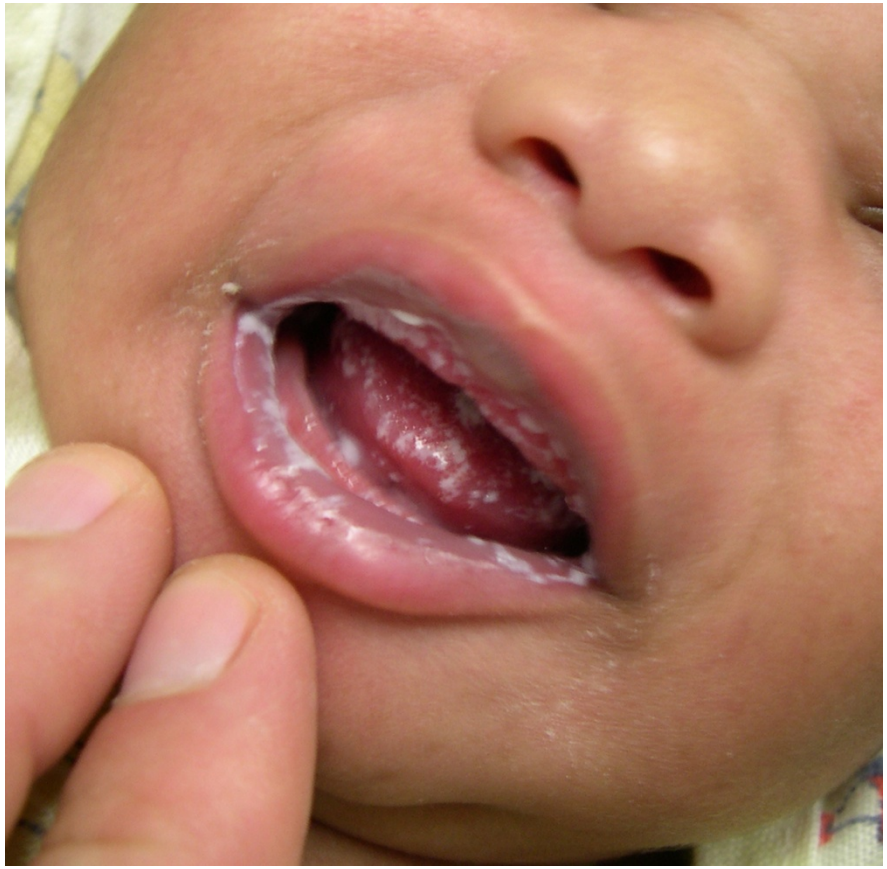
FUNGAL PHARYNGITIS

CAUSES

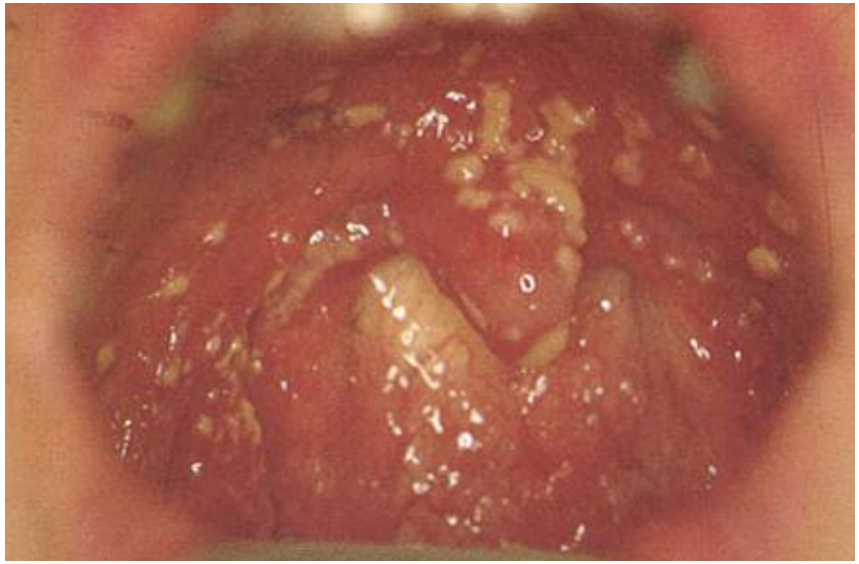
- Long term antibiotics
- Immunosuppresion (Leukopenia,

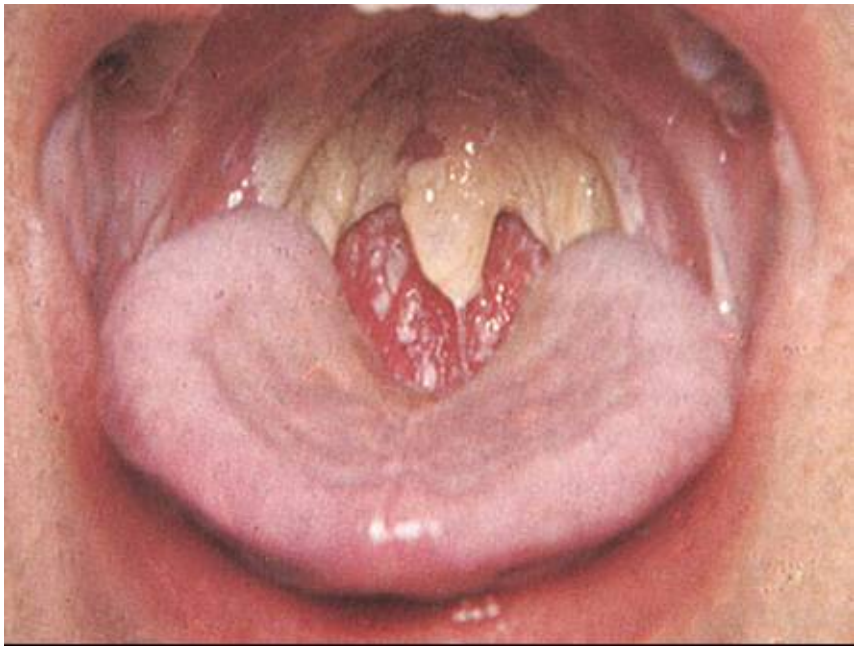
  Corticosteroid therapy etc)

CANDIDIASIS (MONILIASIS, THRUSH)



CANDIDIASIS (MONILIASIS, THRUSH)





Treatment

- Nystatin
- Fluconazole

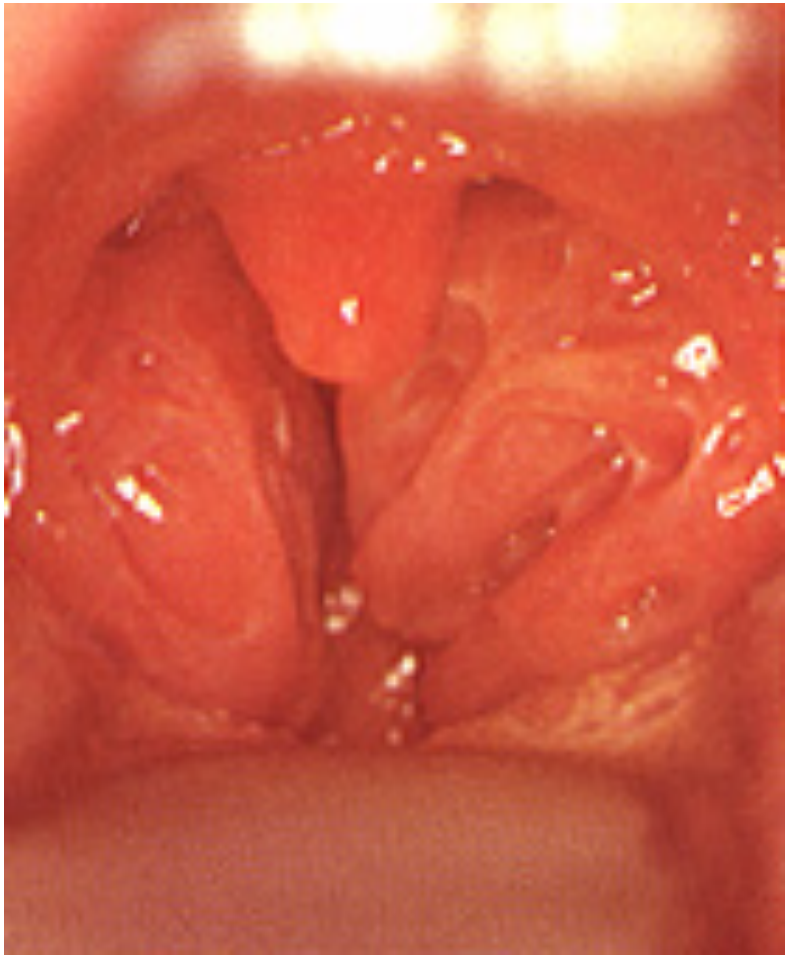
CHRONIC TONSILLAR HYPERTOPHY

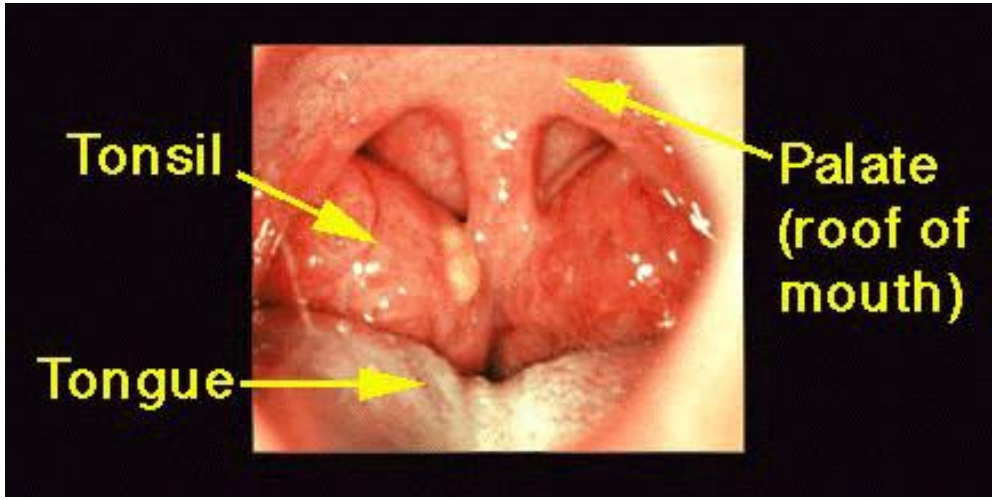
CAUSES

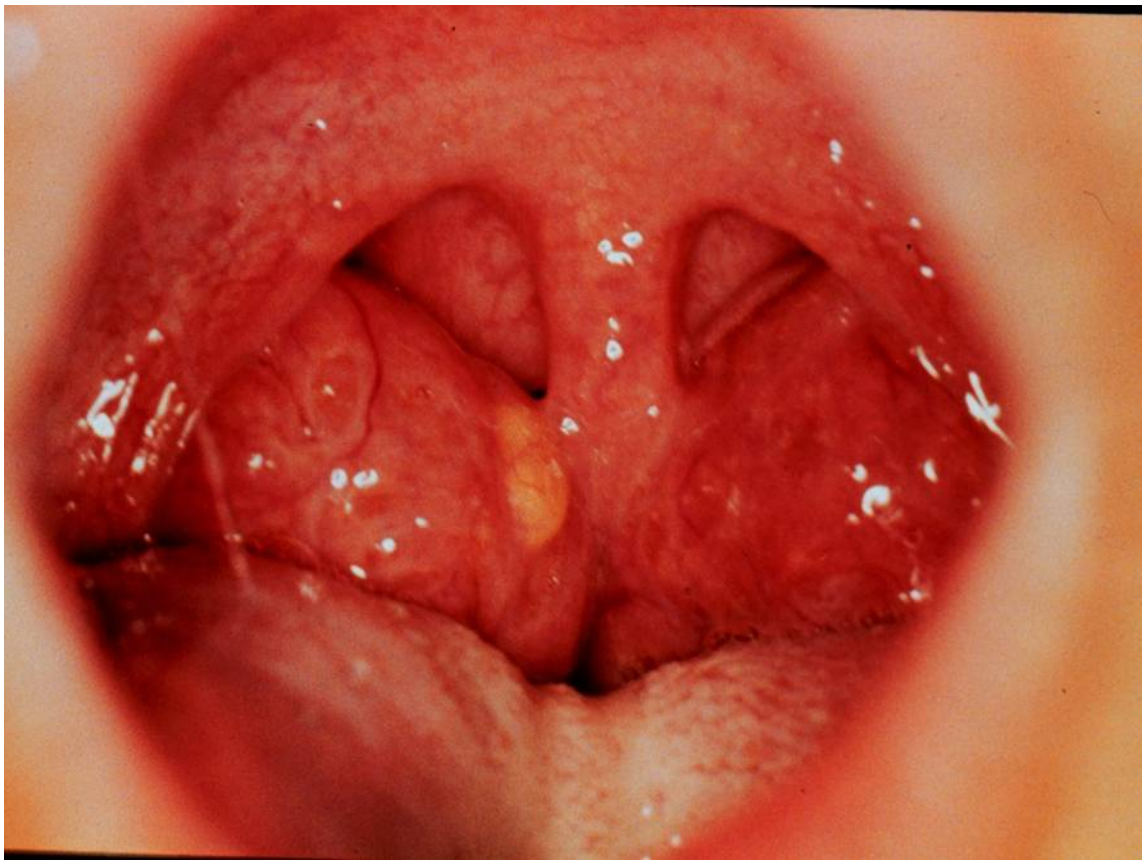
- Chronic or frequent acute infections
- Idiopathic (?exaggerated immune response)

PRESENTATION

- Upper airway obstruction
  - Mouth breathing, snoring
  - Disturbed sleep and apnea
- Pulmonary hypertension, cor pulmonale and heart failure




Tonsil
Palate
(roof of
mouth)
Tongue



TREATMENT

- Tonsillectomy & adenoidectomy

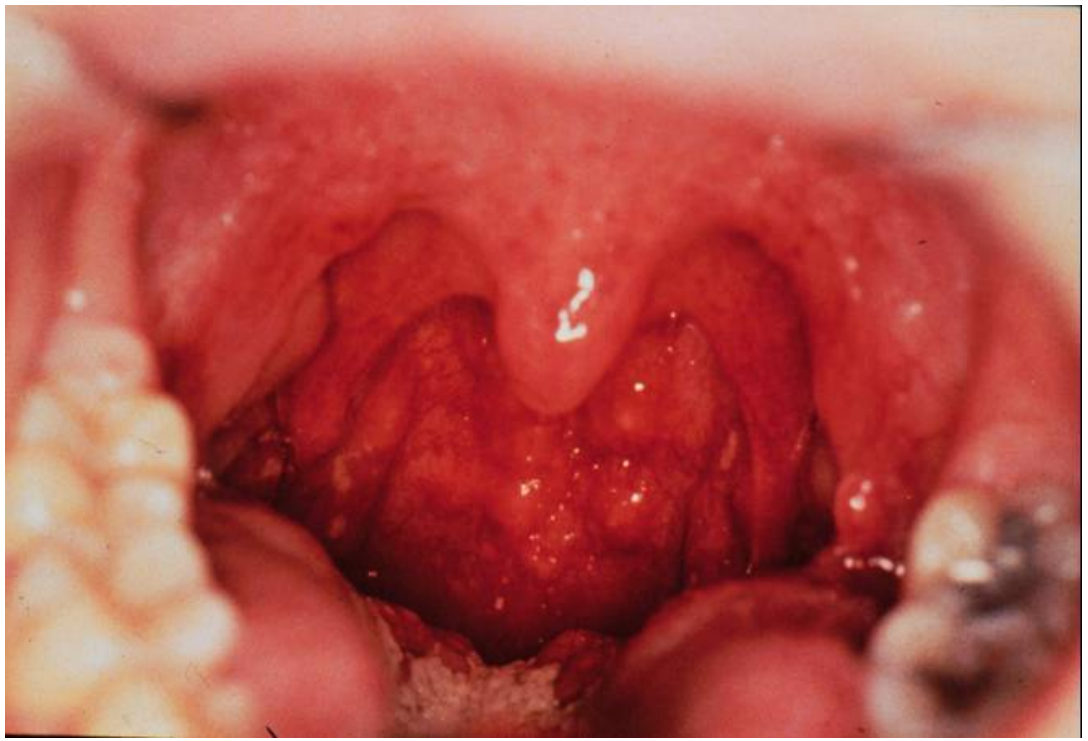
CHRONIC INFECTIONS OF THE PHARYNX

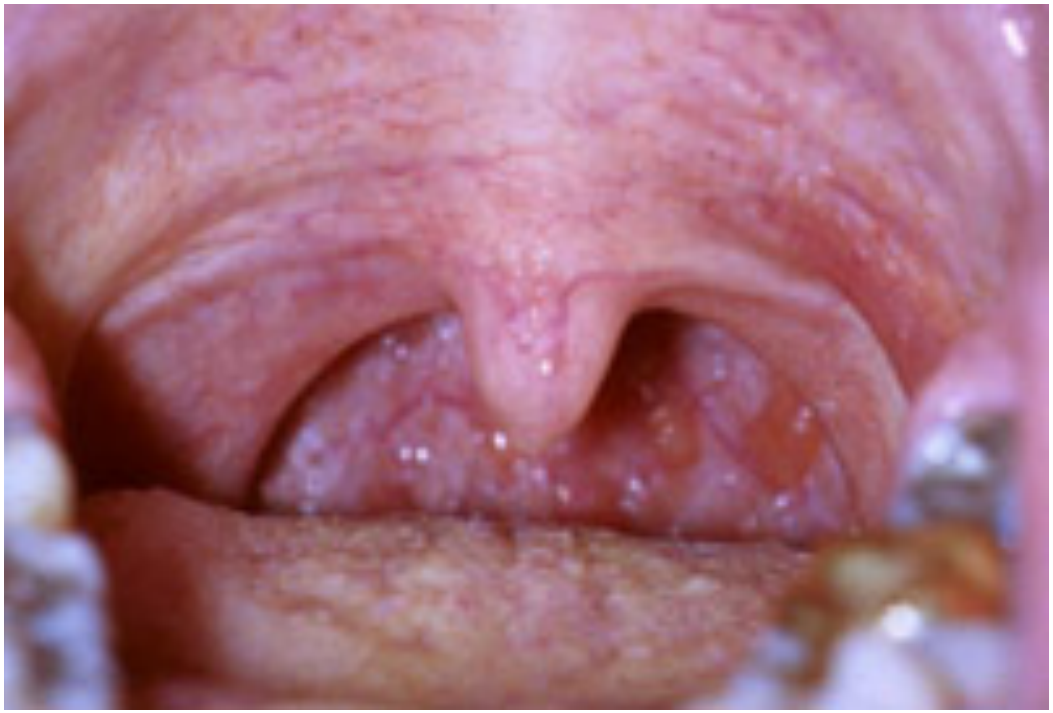
CHRONIC NON-SPECIFIC PHAYNGITIS

- Primary
- Secondary
  - Sinonasal disease
  - Dental infections
  - Chest infections
  - Smoking
  - Gastro esophageal reflux

CLINICAL FEATURES

- Sore throat
- Irritation
- Cough
- O/E





TREATMENT

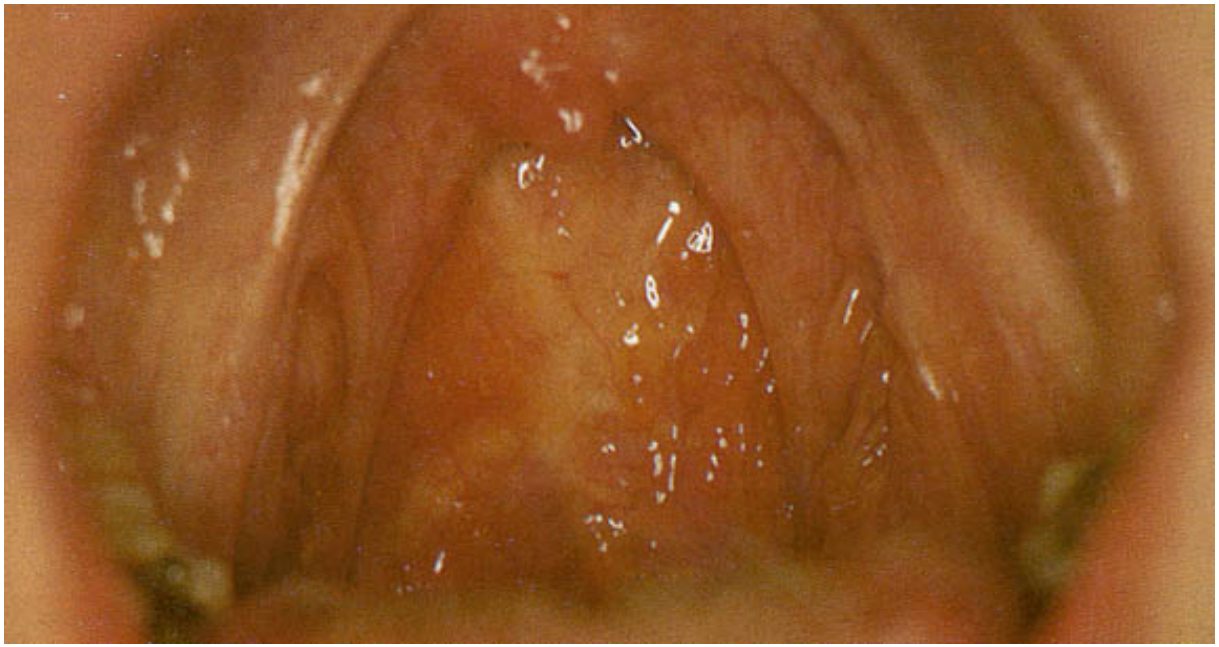
- Treatment of the cause
- Humidification

CHRONIC SPECIFIC PHARYNGITIS

- Tuberculosis
- Syphilis
- Lupus vulgaris
- Leprosy
- Sarcoidosis

CHRONIC TONSILLITIS

- Persistent or recurrent sore throat
- Persistent cervical adenitis
- Halitosis
- Congested tonsils



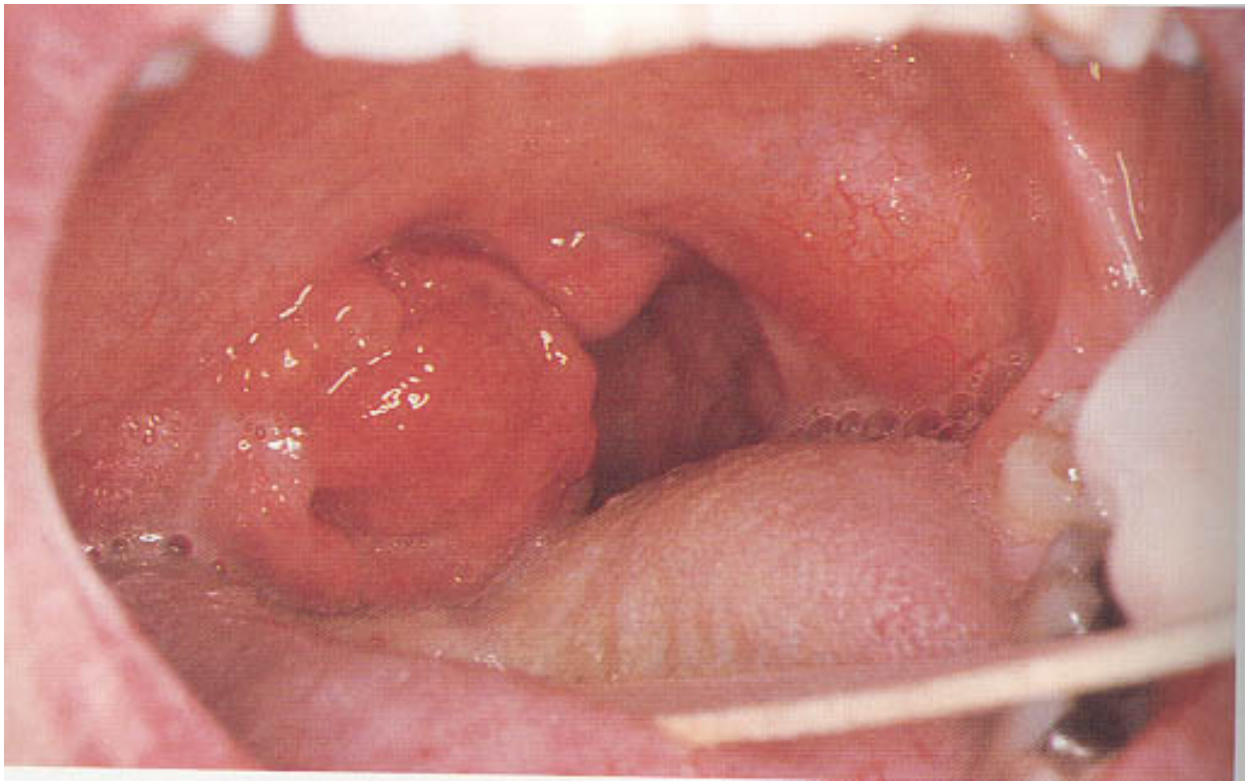
TREATMENT

Tonsillectomy

TONSILLECTOMY

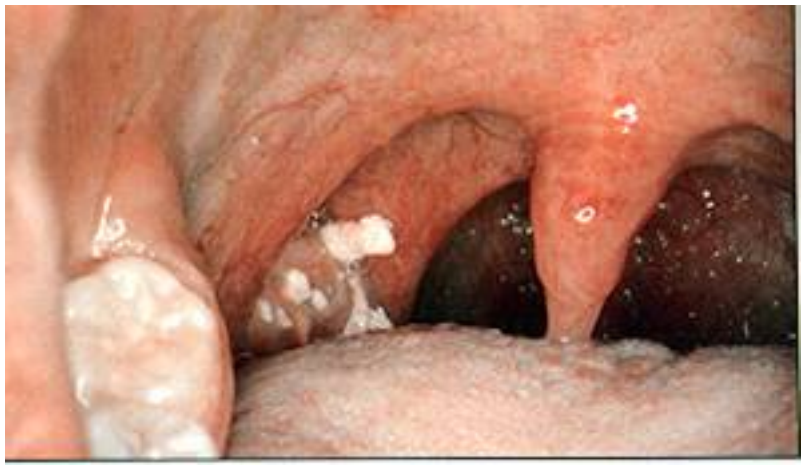
INDICATIONS

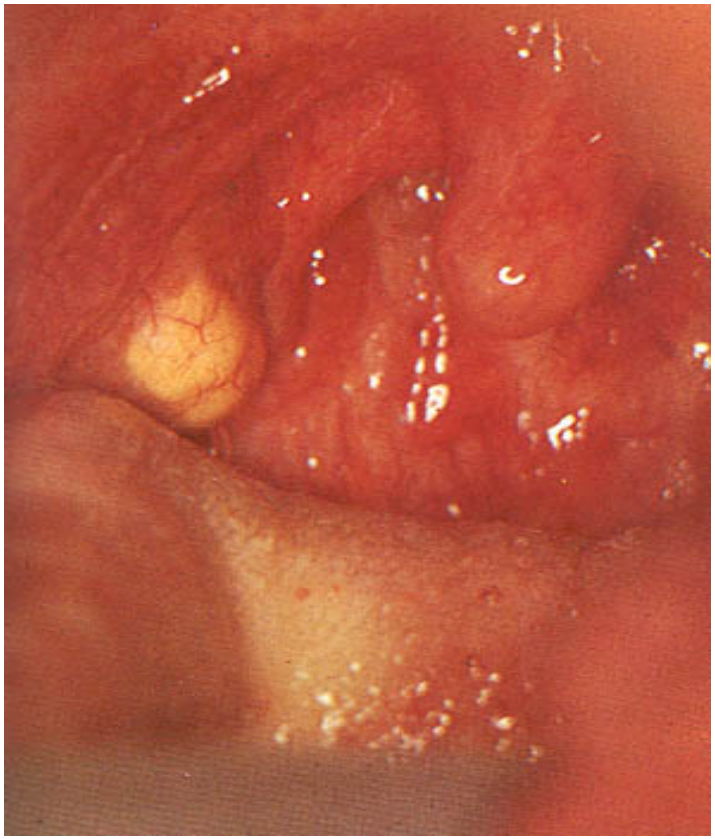
- Obstructing tonsillar enlargement
- Suspected malignancy



INDICATIONS

- Obstructed tonsillar enlargement
- Suspected malignancy
- Repeated attacks of tonsillitis
- Chronic tonsillitis
- One attack of quinsy
- Others





CONTRAINDICATIONS

- Bleeding tendency
- Recent URTI

COMPLICATIONS

- Hemorrhage
  - Primary
  - Reactionary
  - Secondary
- Respiratory obstruction
- Injury to near-by structures
- Pulmonary and distant infections

Primary Hemorrhage

- Bleeding occurring during the surgery
- Causes
  - Bleeding tendency
  - Acute infections
  - Aberrant vessel
  - Bad technique
- Management
  - General supportive measures
  - Diathermy, ligature or stitches
  - Packing

Reactionary Hemorrhage

- Bleeding occurring within the first 24 hours postoperative period
- Causes
  - Bleeding tendency
  - Slipped ligature
- Diagnosis
  - Rising pulse & dropping blood pressure
  - Rattle breathing
  - Blood trickling from the mouth
  - Frequent swallowing
  - Examination

Reactionary Hemorrhage

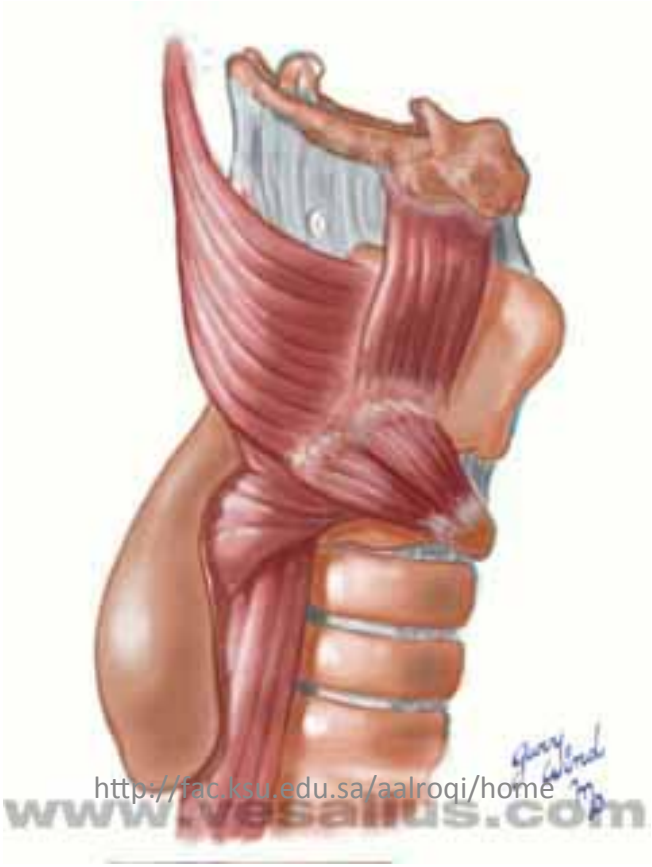
- Treatment
  - General supportive measures
  - Take the patient back to OR
  - Control like reactionary hemorrhage

Secondary hemorrhage

- Occur 5-10 days posoperatively
- Due to infection
- Treated by antibiotics
- May need diathermy or packing

Pharyngeal (Zenker's) Pouch

A mucosal sac protruding through Killian's dehiesence



Pathogenesis

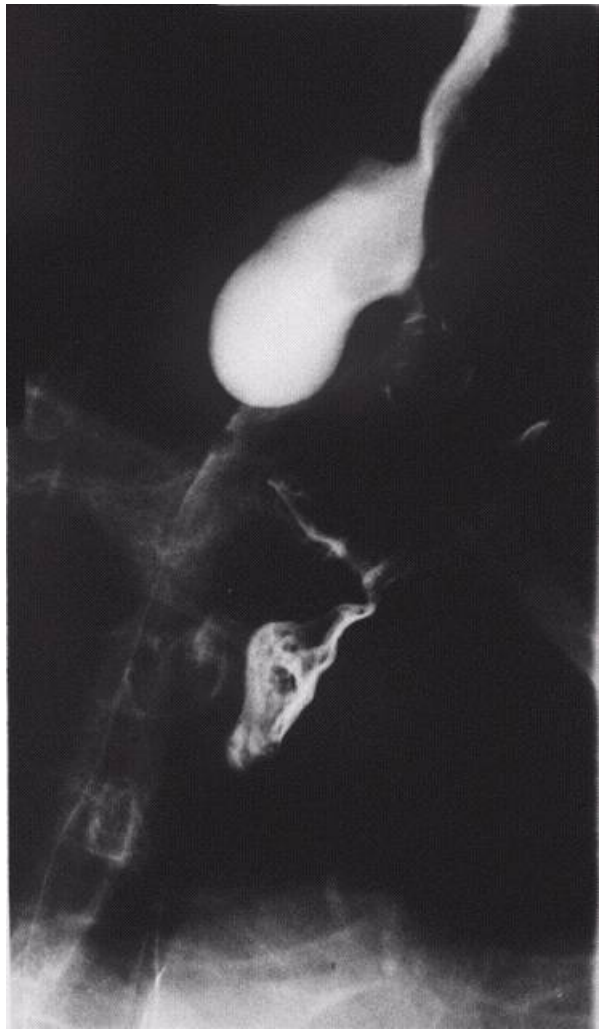
- Most probably related to neuromuscular incoordination
  - ? Failure of relaxation of cricopharyngeus
  - ?Early closure of cricopharyngeus
  - ? Spasm of cricopharyngeus

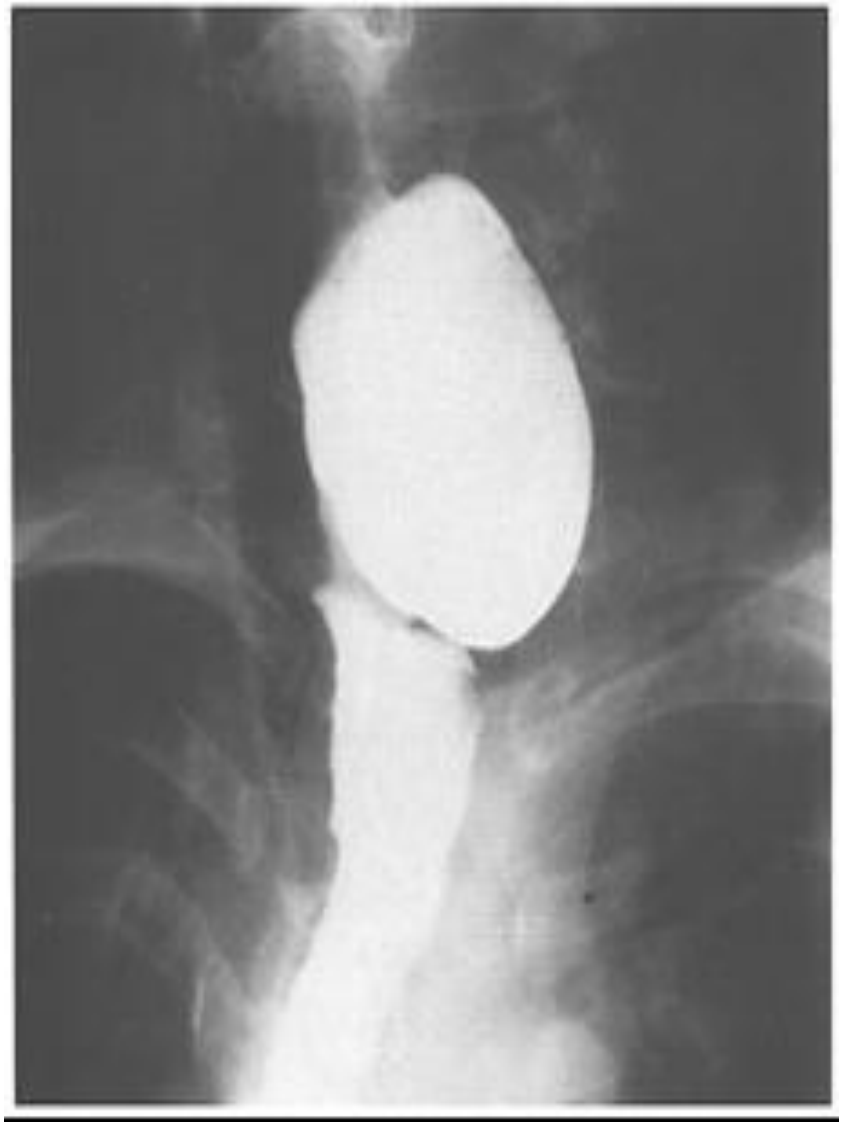
Clinical Features

- Dysphagia
- Regurgitation
- Aspiration

Diagnosis

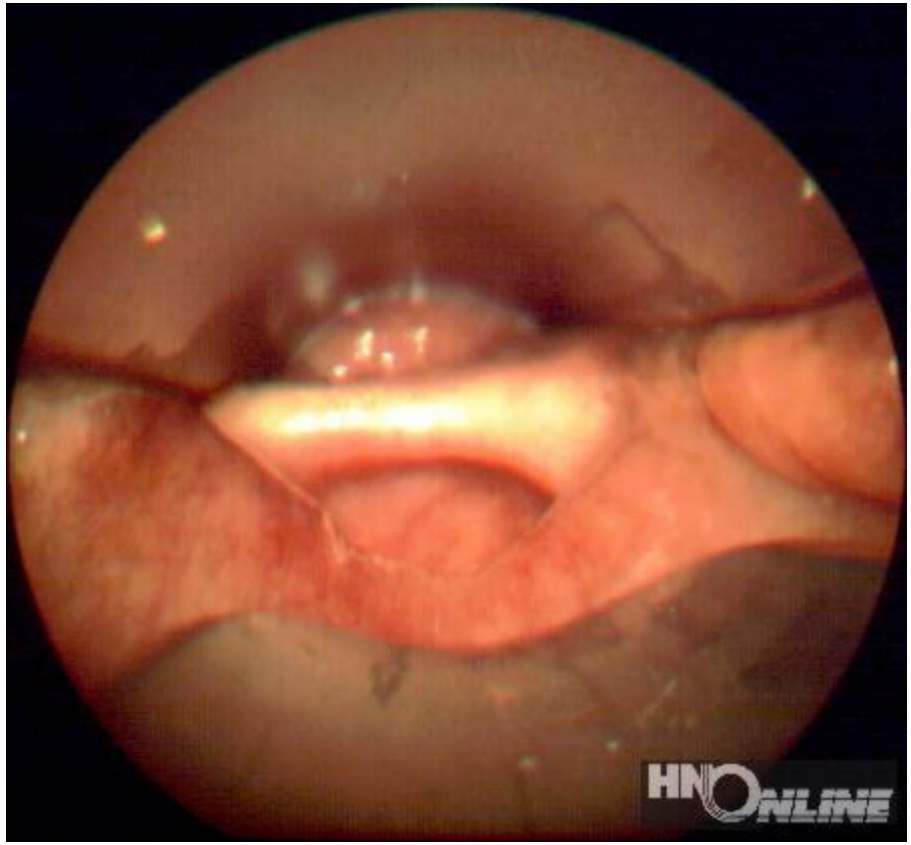
- Clinical examination
- Barium swallow





Diagnosis

- Clinical examination
- Barium swallow
- Endoscopy



Treatment

- Excision

THANK YOU