

# RETROPHARYNGEAL ABSCESS



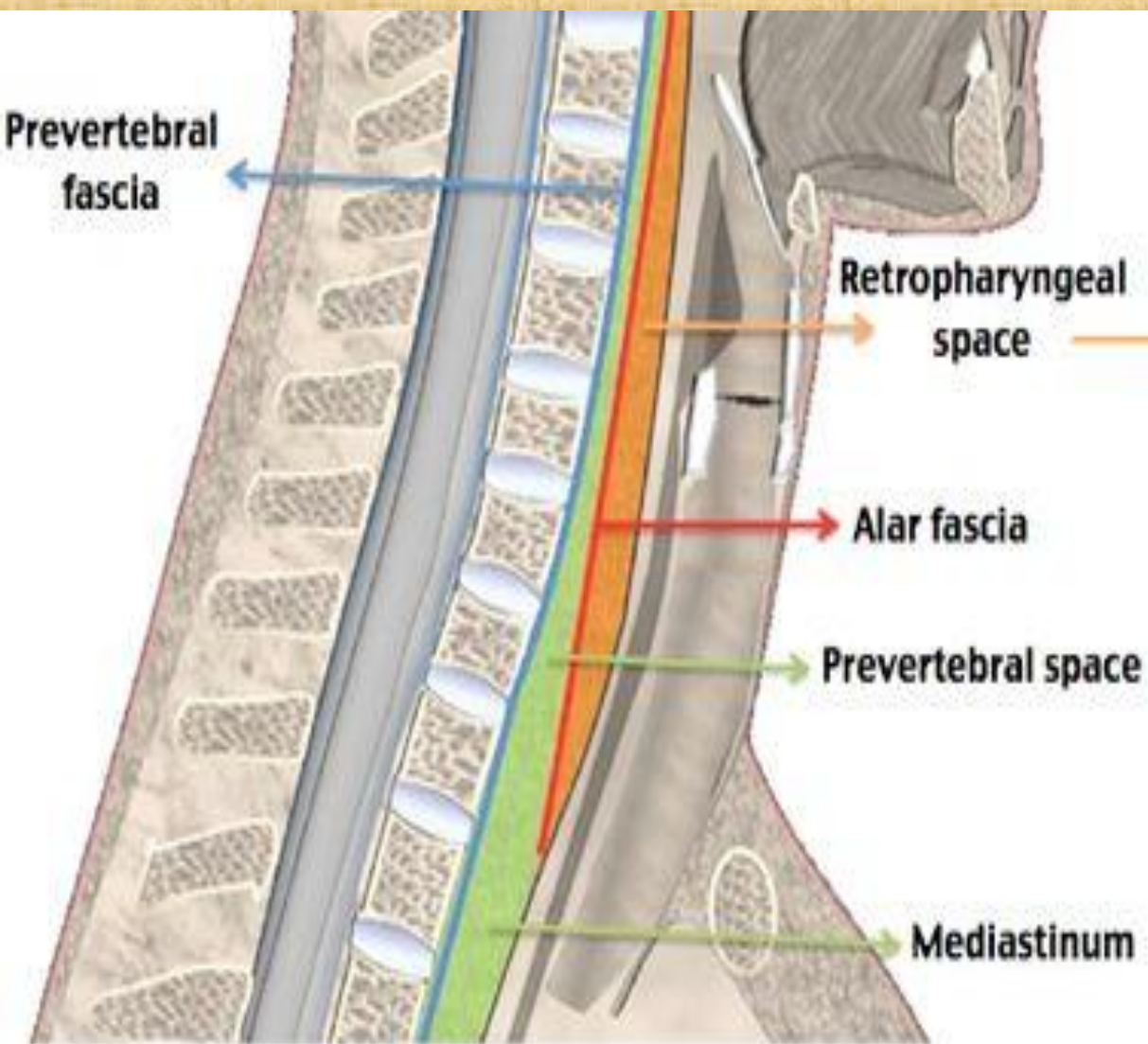
## RETROPHARYNGEAL SPACE:

A space lying behind the pharynx between the buccopharyngeal fascia covering the pharyngeal constrictor muscles & the prevertebral fascia, extending from the base of the skull to the bifurcation of trachea.

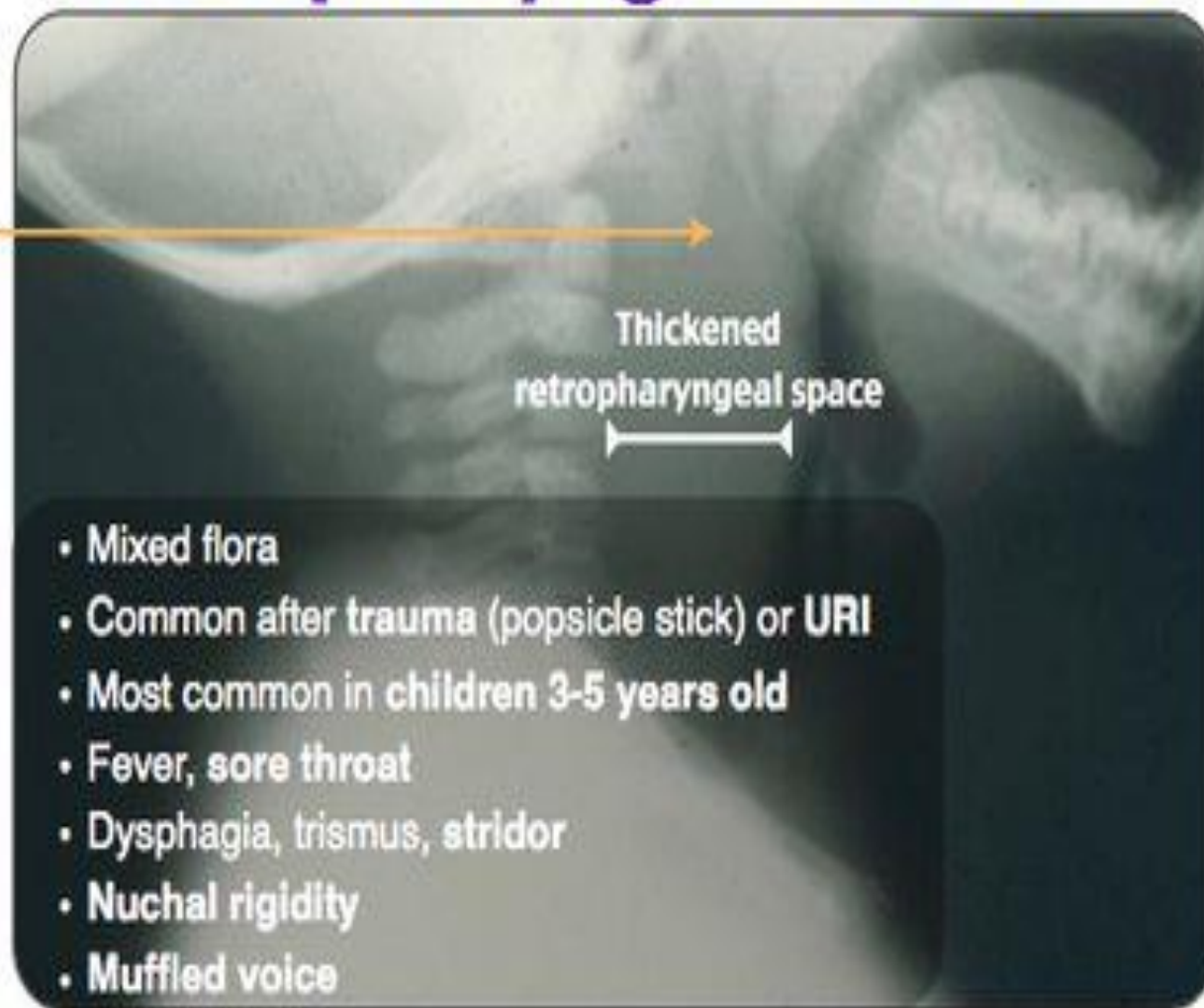
This space is divided into two lateral compartments called spaces of Gillette by a fibrous raphe. Each lateral space contains retropharyngeal lymph nodes which are again divided into 2 groups: lateral- larger, more constant, present in adults & known as node of Rouviere.

medial- present in children, disappears at 3-4yrs of age & absent in adults.

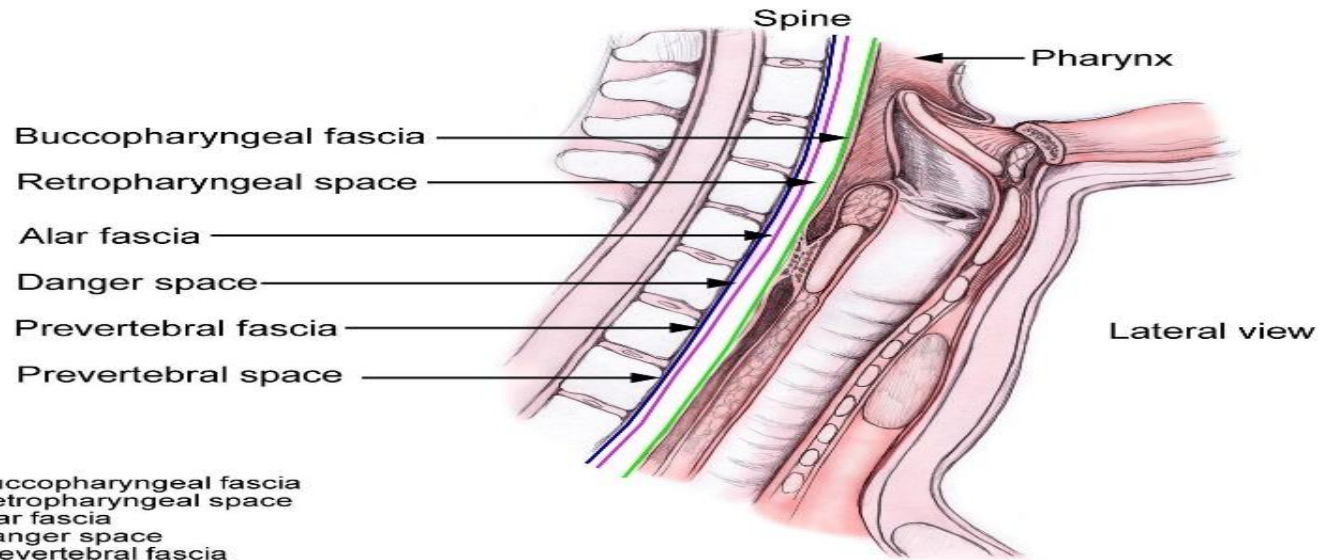




## Retropharyngeal Abscess

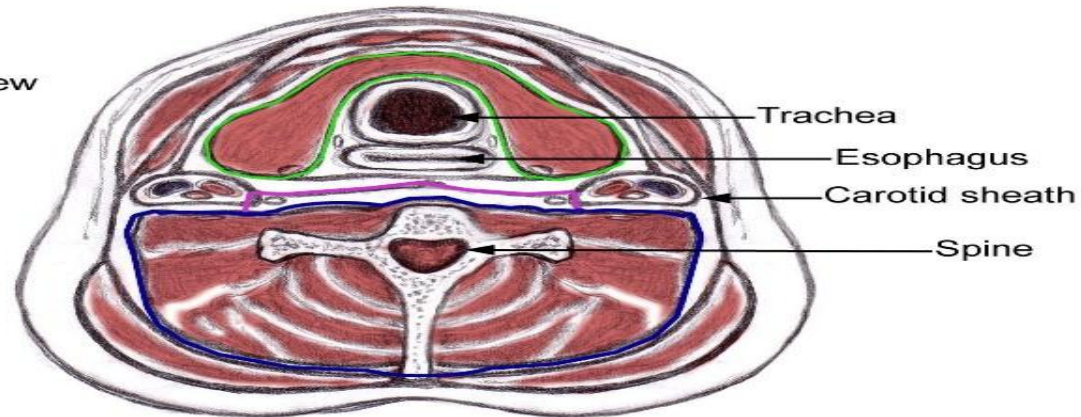


### Fascial spaces of the neck



- Buccopharyngeal fascia
- Retropharyngeal space
- Alar fascia
- Danger space
- Prevertebral fascia
- Prevertebral space

### Cross sectional view



## BOUNDARIES:

Anteromedially – Buccopharyngeal fascia & superior constrictor muscle

Posteromedially – transverse process of cervical vertebrae, prevertebral muscles & fascia.

Laterally – upper part, tonsil & parotid gland.

lower part, sternomastoid muscle, strap muscles & intervening deep fascia & ascending ramus of the mandible with medial pterygoid muscle internally.

Inferiorly – communicates with the mediastinum.



## **CONTENTS:**

- \*Great vessels of the neck
- \*Ascending palatine & ascending pharyngeal arteries
- \*Deep cervical lymph nodes
- \*Last 4 cranial nerves
- \*Cervical sympathetic chain

## DEFINITION: 2 TYPES

### ACUTE RETROPHARYNGEAL ABSCESS

An acute infection due to suppuration of retropharyngeal lymph nodes secondary to infection in the adenoids, nasopharynx, postnasal sinuses or nasal cavity.

OR

Is an abscess lying in the potential space between buccopharyngeal & prevertebral fasciae.





**Endoscopic finding  
of retropharyngeal  
abscess**



**CAUSES:** \* Retropharyngeal lymph node suppuration  
\* Penetrating injury to pharyngeal wall by sharp foreign body  
\* Infection tracking from an ASOM or Mastoiditis along Eustachian tube or by abscess formation below the petrous bone (rarely)

**Neoplasm must be excluded**

**ORGANISM:** Streptococcus Pneumoniae



## CLINICAL FEATURES:

- Age - <3 yrs. due to atrophy of RP lymph node in childhood.
- Sex - > in males.
- Difficulty in breathing & suckling.
- Croupy cough
- Stiffness of the neck (Torticollis)- keeping head extended
- Fever

## ON EXAMINATION:

- Whole pharynx congested
- Bulging of the posterior pharyngeal wall on one side of the midline
- Oedema of the larynx



## INVESTIGATIONS:

X-Ray soft tissue neck, lateral view shows widening of the prevertebral soft tissue, straightening of the cervical vertebral column & pushing the air column forward.

Sometimes air or fluid in prevertebral area.

CT scan of the neck showing bulging of the Retropharyngeal space.



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**Fig.1:** Retropharyngeal abscess on X-ray and CT. The arrows on the left image points at the bulge of the retropharyngeal space.

## TREATMENT:

1) Incision & drainage of the abscess without anaesthesia perorally, patient lying supine with head low.

Vertical incision given in the most fluctuant area with the help of mouth-gag. As soon as the incision is given, patient is turned to one side & suction given to prevent aspiration.

Pre-requisites:

- \* Good light source
- \* Strong sucker
- \* Expert assistant

2) Intravenous antibiotic

3) Tracheostomy if large abscess or laryngeal oedema



## **CHRONIC RETROPHARYNGEAL ABSCESS**

**(Tubercular in nature)**

### **CAUSES:**

- 1) Caries of cervical spine due to **TB (Tuberculosis)** usually seen centrally behind the prevertebral fascia
- 2) TB infection of RP lymph nodes **secondary to TB** of deep cervical nodes usually seen on one side of the posterior pharyngeal wall behind the buccopharyngeal fascia

## **CLINICAL FEATURES:**

- 1) Age – Adults & adolescents
- 2) Slow onset
- 3) Mild dysphagia
- 4) Sore throat & cough maybe present
- 5) Muffled voice

## **ON EXAMINATION:**

- 1) Fluctuant swelling on one side in case of retropharyngeal lymph node infection & centrally in case of TB caries of cervical spine
- 2) Enlarged tubercular cervical lymph nodes



## **INVESTIGATION:**

**X-Ray soft tissue neck, lateral view** showing caries of cervical spine & collapsed vertebrae in the intervertebral discs which are diagnostic.

**TREATMENT:** 1) **Incision & drainage** of the abscess with a vertical incision along the anterior border of sternocleidomastoid (if low abscess) & posterior border of the sternocleidomastoid (if high abscess).

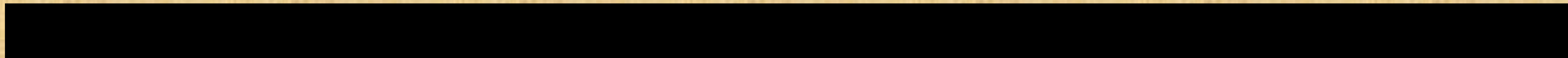
2) **Antitubercular therapy** for 12 months.

3) **Cervical collar** for 12 months till spine gets stable.





THANK YOU



## TYPES OF TRACHEOSTOMY:

Temporary: Emergency – Advanced carcinoma larynx with stridor

Elective - Part of a planned procedure, e.g., major head neck surgery.

Ventillated patient for prolonged respiratory support.

Permanent: Total laryngectomy/ Total laryngopharyngectomy.

Aspiration pneumonia



## COMPLICATIONS:

Immediate:

Anaesthetic complications

Haemorrhage- thyroid veins/jugular veins/ arteries from skin surface

Air embolism

Cardiac arrest

Local injury to thyroid cartilage, cricoid cartilage, RLN



## Intermediate:

Displacement of the tube

Surgical emphysema

Pneumonia, pneumothorax

Perichondritis

Tube obstruction by secretion or crusts

Tracheoarterial fistula

Tracheal necrosis

Dysphagia



Late:

Stenosis

Decannulation problems

Tracheocutaneous fistula

Disfiguring scar



THANK YOU

