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Benign Vocal Fold lesions

Part One



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Main topics

- What are Benign Vocal Folds Lesions?
- What causes these lesions?
- What are the manifestation of these lesions?
- Diagnosis?
- Management?



Benign Vocal Fold lesions

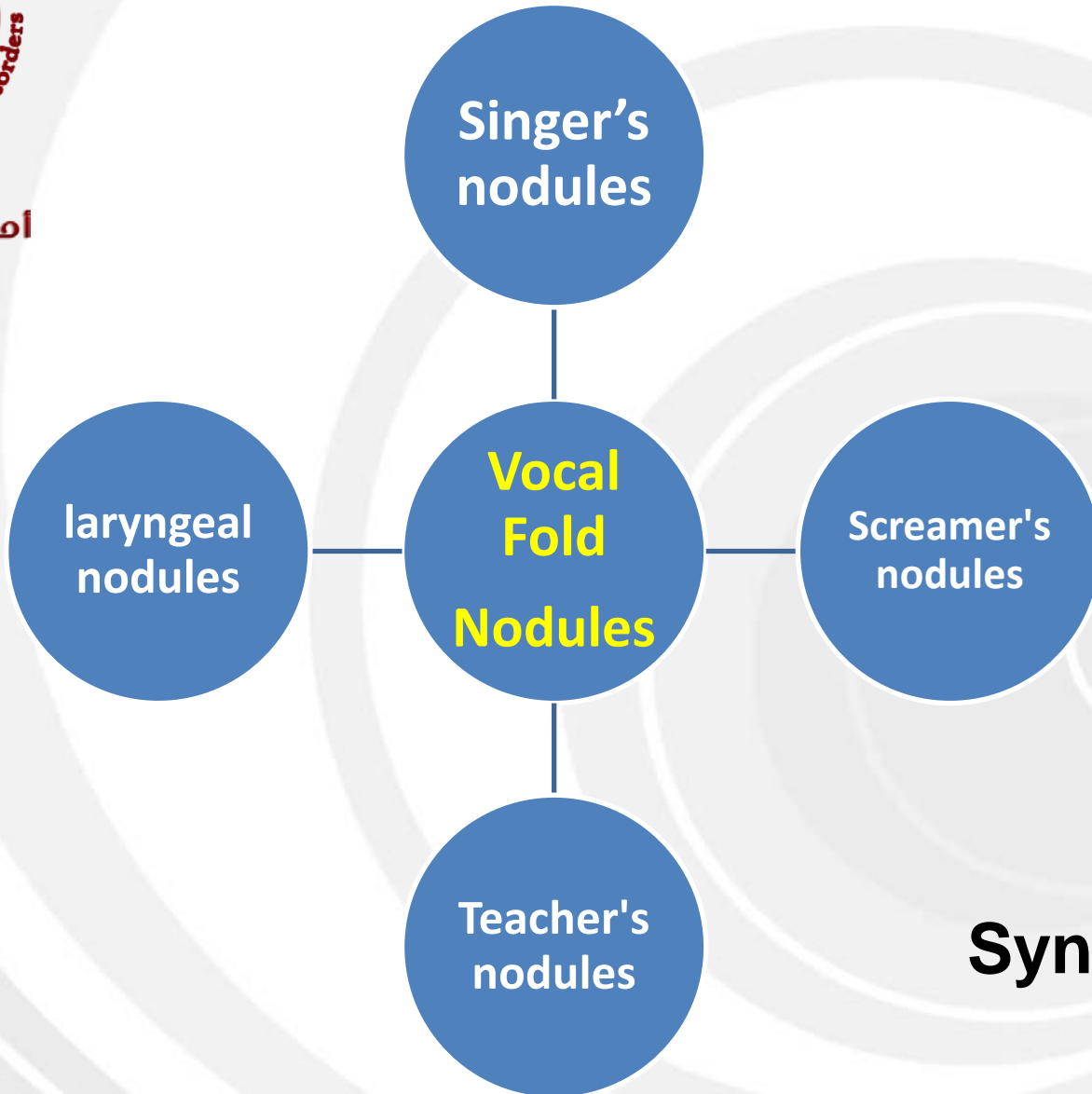
Benign abnormal growths within or along the covering of the vocal fold

Vocal fold
Nodules

Vocal fold
Polyyps

Vocal fold
Cysts

Vocal Fold Nodules



Synonyms

- **Definition:**

Small, bilateral, usually symmetrical swellings on the border of the junction of the anterior and middle thirds of the membranous vocal folds.

Vocal Fold nodules





- **Types:**

1. ***Childhood type (Screamers' nodules).***

2. ***Adult type.***



• Etiology:

- Long-standing:

➔ Vocal abuse.

➔ Vocal misuse.

- Smoking.

- Anxiety.

- Allergy.

- LPRD.



- **Epidemiology:**

- **Children**



Boys.

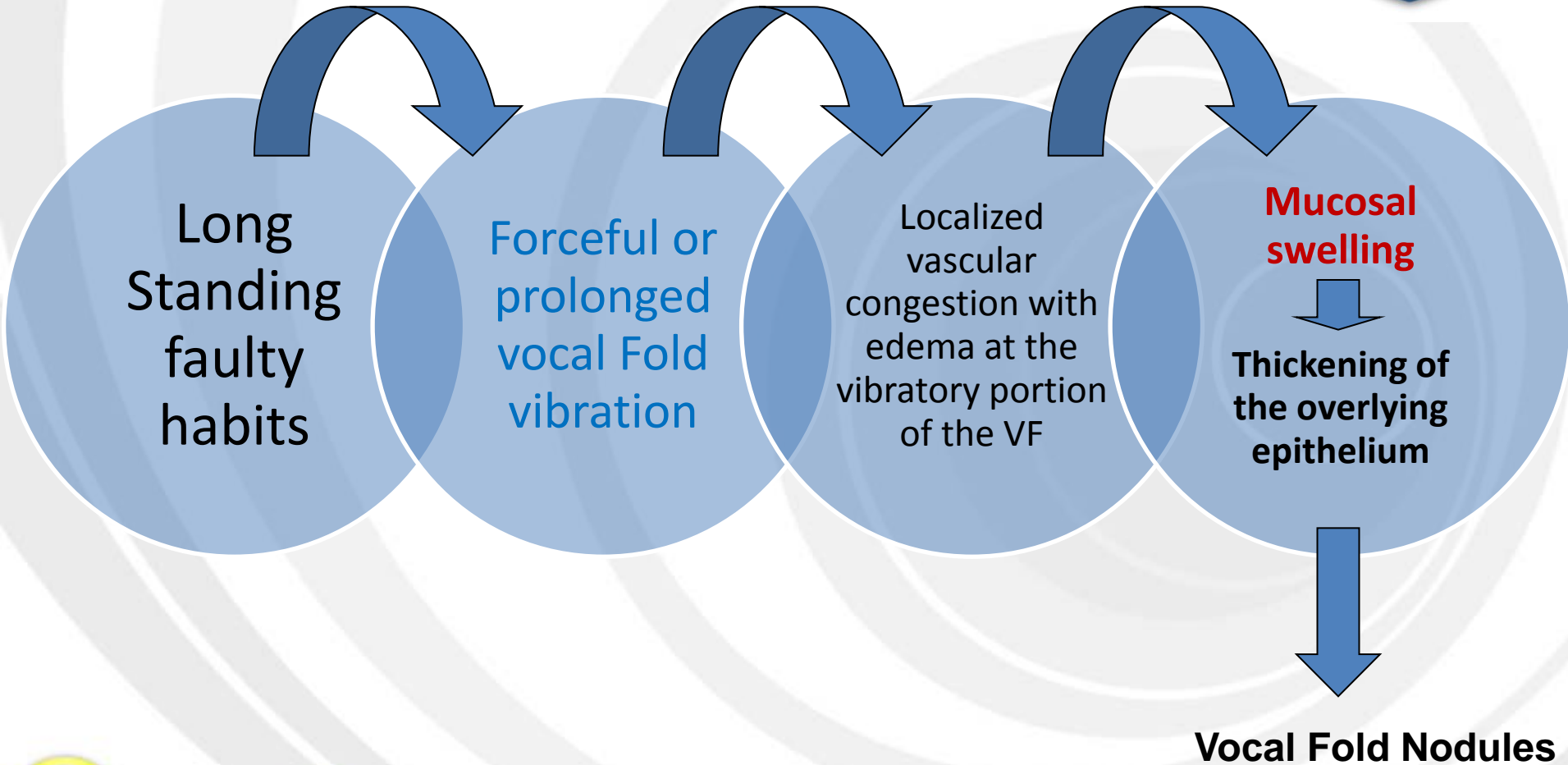
- **Adults**



Female.

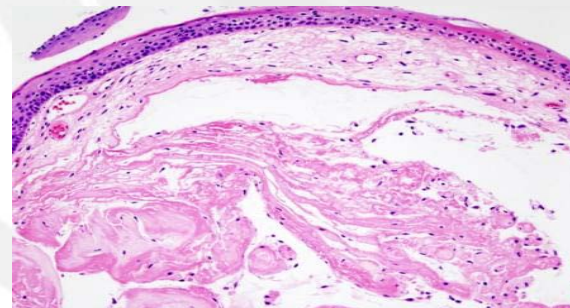
Vocal fold nodules are almost always a **female** disease.

• Pathogenesis:



- **Histopathology:**

- The pathology is located in the *superficial layer of lamina propria*.
- No evidence of chronic inflammation.





Clinical picture:

- Dysphonia.
- Phonasthenic symptoms.
- Voice:
 - low pitch.
 - Decreased loudness.
 - Diplophonia .

- **Laryngeal endoscopy:**
 - Usually bilateral and symmetrical lesions.
- **Site:** At the junction of the anterior and middle thirds of the membranous vocal folds.
 - **Acute nodules:**
 - Translucent, soft, and pliable.
 - **Chronic nodules:**
 - Firm, whitish, and thick.

• Stroboscopy :

- Mucosal wave is a useful differentiating parameter between **soft** and **fibrous** nodules.

- Acute nodule

→ observed.

- Chronic nodule

→ absent.

- Incomplete glottal closure

→ Hourglass appearance.



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Teacher's Nodules
Singer's Nodules



•Treatment strategy:

Children's nodules:

1. Children under the age of 10 years:

- Strict *vocal hygiene advice* and follow up.
- Boon voice therapy.

2- Children above 10 years:

- *Voice therapy.*



Adult's nodules:

1- Behavioral readjustment voice therapy.

Small soft vocal nodules are effectively and satisfactorily treated by *Smith Accent Method*.

2- No improvement

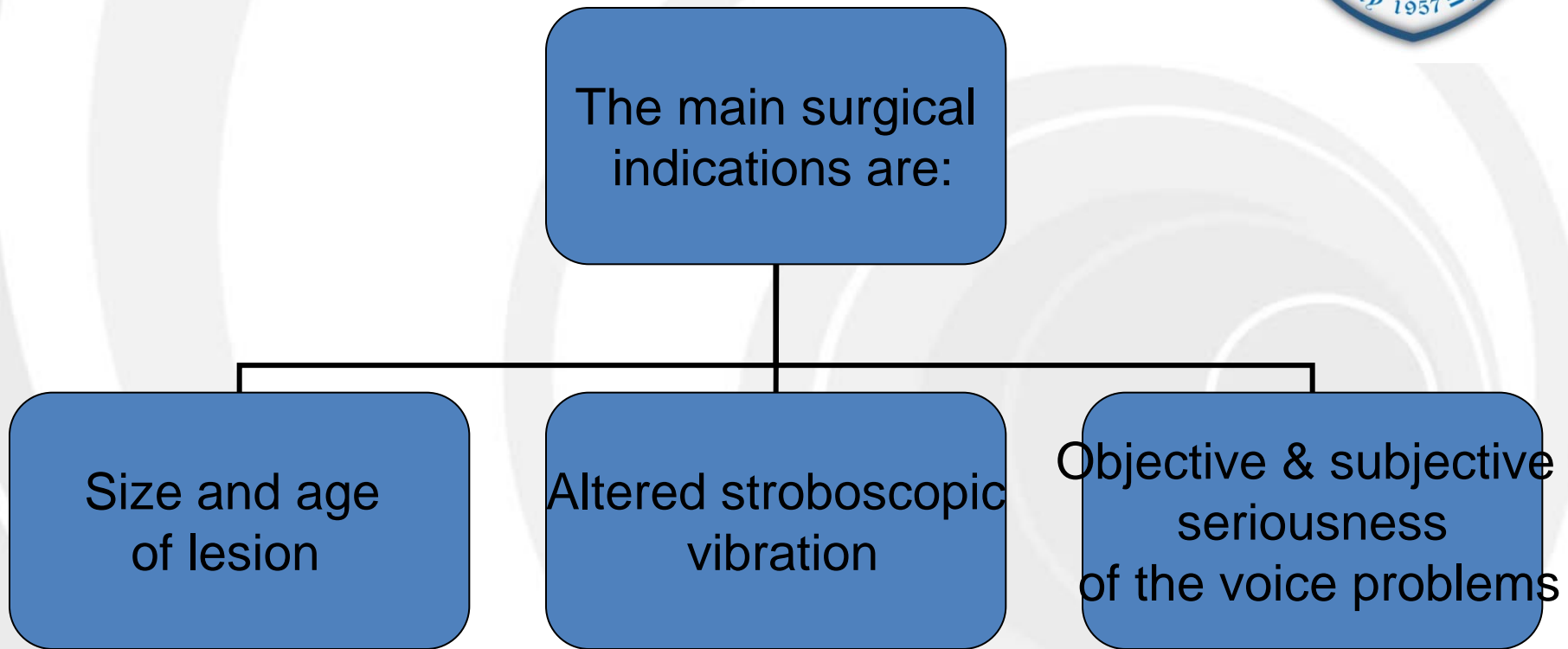


Surgery



Voice therapy to prevent recurrence.

Indications for surgery:



+ Failure of voice therapy.

in all cases wise **not to rush** towards surgery,
but rather to begin with voice therapy.

Fibrotic nodules:

Vocal fold nodules
became asymmetrical

lost their mucosal
wave

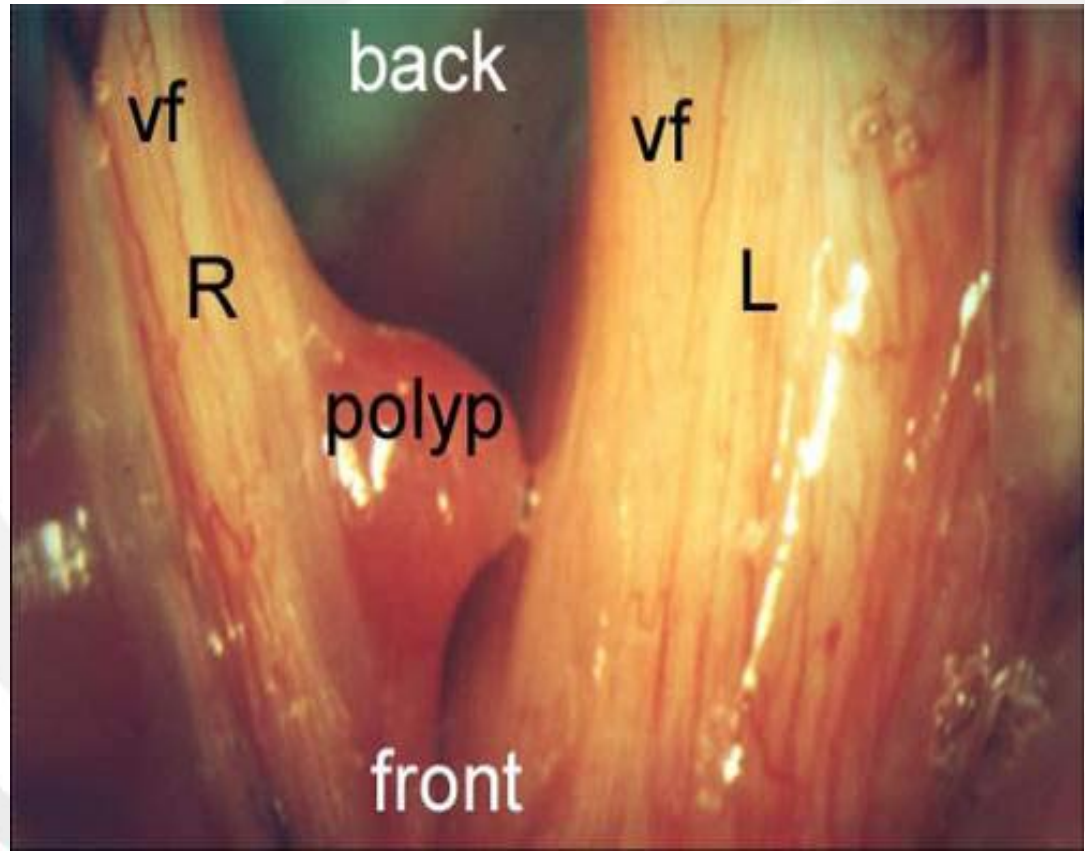
Their translucency
was lost

Vocal Fold Polyps

• Definition:

- Swelling on the middle third of the membranous vocal fold.
- Often on the **free edge**.
- Usually **unilateral**.
- Sessile or pedunculated.
- Very mobile when pedunculated

Vocal fold Polyp



- **Etiology:**

- Vocal abuse and misuse (vocal trauma).
- They can occur as a result of a



Single, acute vocal trauma.

- **Epidemiology:**

More common in

males.



Severe voice abuse

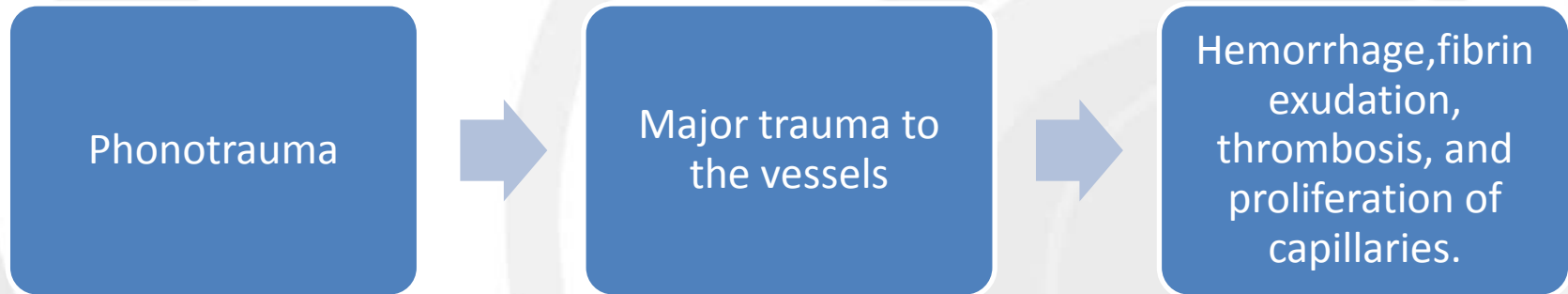
Noisy environment





Pathogenesis:

acute event



Integral repair of the initial damage is hampered by recurrent movements of the lesion during phonation, inducing recurrent capillary trauma

This initiating trauma may cause capillary damage leading to edema, bleeding, and leakage of fibrin.



- **Histopathological types:**

The pathology is located in the *superficial* layer of lamina propria.

I. Fibrous polyp.

II. Telangiectatic polyp.

III. Hyalinous polyp.

There is no evidence of an inflammatory reaction.



- **Clinical picture:**

1. Dysphonia.
2. Phonasthenic symptoms.
3. Diplophonia.
4. Voice breaks.

• Laryngeal endoscopy:

Vocal fold polyps usually develop around the vocal fold edge at variable sites of the membranous vocal fold, but usually at the middle third.

They may be:

- ➔ Reddish, grayish or whitish.
- ➔ Small or large.
- ➔ Unilateral or bilateral.

1. Sessile or broad-based polyps:

Involve varying extents of the vocal folds .

2. Pedunculated polyps:

Polyp mass is attached to the vocal fold by a stalk-like appendage.





- **Stroboscopic signs :**

- Reduced mucosal wave



Hemorrhagic or fibrous polyps.

- Normal or increased



Edematous polyp.

- A periodic vibrations .

- Asymmetrical motion of the vocal folds.

- Incomplete glottal closure.

- **Treatment:**

1. Typically, *surgical removal* is required.
2. Vocal hygiene advice is required to avoid recurrence.
3. Post-operative voice therapy.



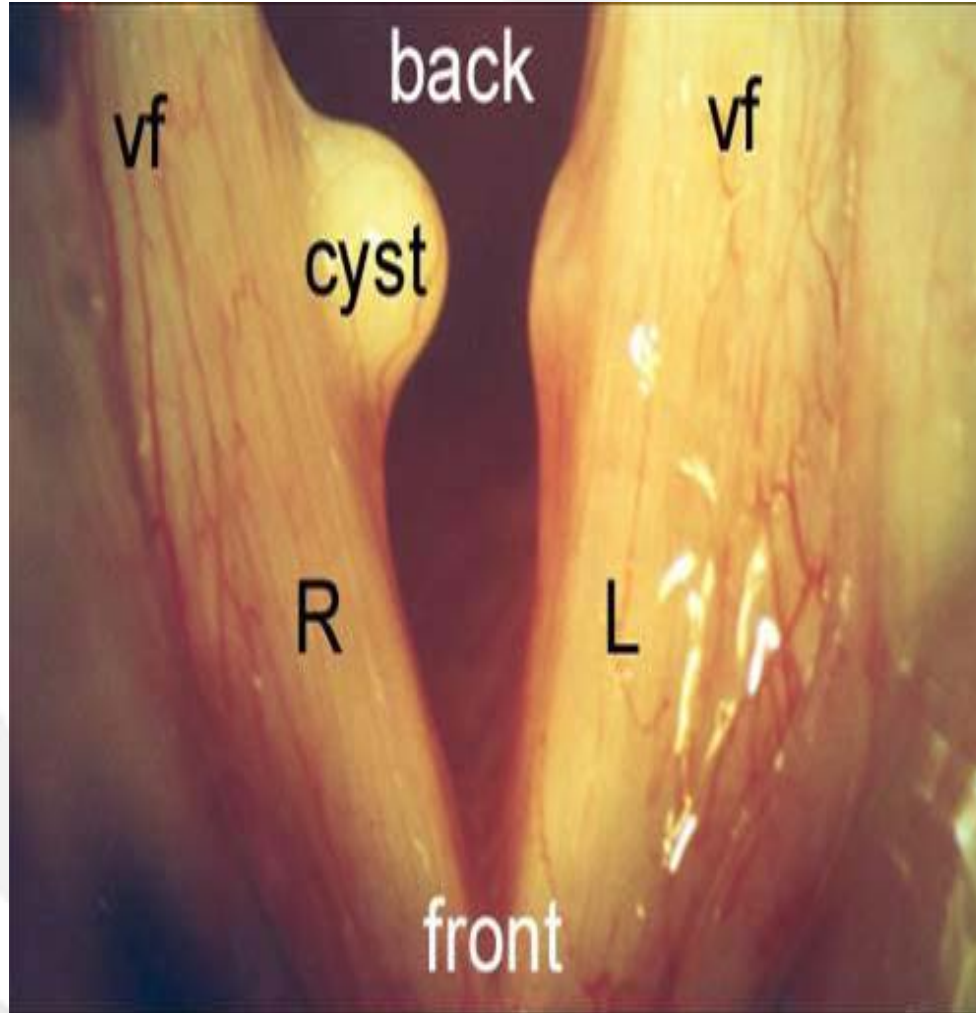
Vocal Fold Cysts



- **Definition:**

- Vocal fold cyst is a unilateral or bilateral smooth swelling.
- Usually on the middle third of the membranous vocal fold.
- Covering part of mucosa looks normal, but it is usually immobile during phonation.

Vocal fold Cyst



Types:



1. Epidermoid cyst:

more common

Site



on the free border of the vocal fold.

2. Mucus-retention cyst:

Site



on the upper or lower surface of the vocal fold.

Pathogenesis:

Epidermoid cysts

Mucus-retention cysts

Congenital origin

Acquired origin



epithelial cells are **buried congenitally** in superficial layer of lamina propria.

epithelial cells are **buried** in the superficial layer of lamina propria as a result of **repeated vocal trauma**.

when the **duct** of a mucus producing gland becomes **plugged** and **retains** glandular **secretions**. They, also, can be due to **repeated vocal trauma**



- **Epidemiology:**

Vocal fold cysts occur most frequently **in young adult females**.

Generally, cysts can be seen in all ages, including children.

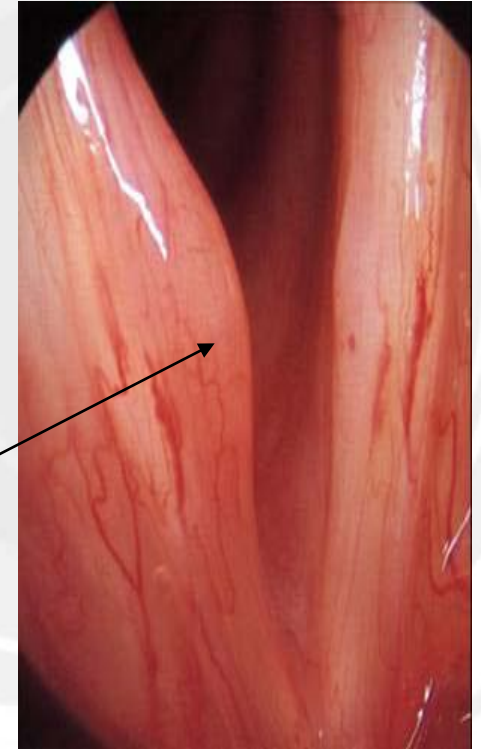


- **Histopathology:**

- The pathology is located in the *superficial layer of lamina propria*.
- There is no evidence of chronic inflammatory reaction.

- **Clinical picture:**

- Dysphonia.
- Phonasthenic symptoms.



Vocal fold cyst

• Laryngeal endoscopy :

- A cysts appears as a small sphere on the margins of the vocal folds.
- it may appear as a fullness of the vocal fold with or without dilated capillaries on the surface.
- They are usually unilateral.
- The cyst is something like **small balloon** full of fluid.

- **Stroboscopy:**

- Cysts are usually differentiated from nodules and polyps by means of **stroboscopic** observation:

- **No mucosal wave** is observed on the area over the cyst.

- Very small cysts are first detected by stroboscopy.

- Successive vibrations are sometimes **aperiodic**.

- The vibration of the two folds is **asymmetrical**.

- Incomplete glottal closure .

- **Treatment:**

- Surgical removal.
- Post-operative voice therapy.
- Vocal hygiene advice.





كرسي بحث
أمراض الصوت والبلع



Thank You