

## - BENIGN MUCOSAL LESIONS OF THE LARYNX -

1- Vocal fold nodules

2- Vocal fold polyp

3- Intracordal cyst

4- Reinke's edema

5- Intubation granuloma

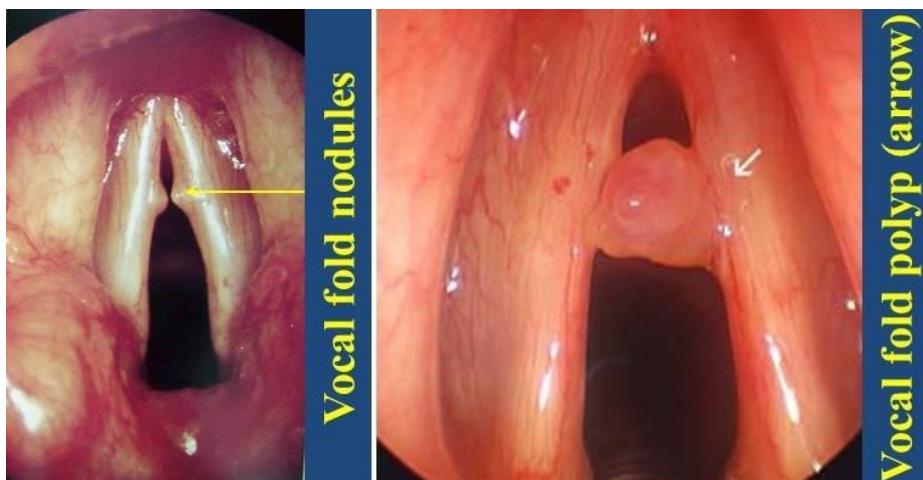
### **(1) Vocal fold (singer's) nodules:-**

#### ❖ Incidence:

- In children (screamer's nodules): commoner in ♂
- In adults: almost always in ♀
- Most commonly among voice abusers e.g. teachers, singers, talkative individuals

#### ❖ Etiology: Prolonged voice abuse

#### ❖ Pathology: Localized epithelial hyperplasia and/or subepithelial organized microhematomas of the vocal folds.



**Fig (28) Vocal nodules and vocal polyp**

#### ❖ Clinical picture:

##### • Symptoms:

- - Persistent dysphonia
- - Phonasthenia

##### • Signs:

- Bilateral, symmetrical, small sessile smooth swellings at the junction of the anterior 1/3 and posterior 2/3 of the free margin of the vocal folds (midpoint of the membranous folds) i.e. site of maximum contact of the vocal folds during phonation (maximum trauma) (fig 28).

#### ❖ Treatment:

##### • **Conservative treatment:** most nodules disappear with it:

- Voice rest, good hydration.

- Voice therapy
- **Surgical treatment:**
  - In a minority of cases with failed conservative treatment
  - Microlaryngosurgical excision by or laser excision

## **(2) Vocal fold polyp:-**

- ❖ **Incidence:** More common in ♂
- ❖ **Etiology:** Extreme vocal exertion (acute voice trauma)
- ❖ **Pathology:** Extreme vocal exertion → localized sub-epithelial hemorrhage (hemorrhagic polyp), edema (edematous poly), or fibrosis (fibrotic polyp) of the vocal fold.
- ❖ **Clinical picture:**
  - **Symptoms:** Usually, abrupt onset of dysphonia during extreme vocal exertion
  - **Signs:** Unilateral, sessile or pedunculated, smooth swelling at the midportion of the membranous vocal fold.
- ❖ **Treatment:**
  - Conservative treatment: occasionally early hemorrhagic polyp resorb completely with voice rest.
  - Surgical treatment: Microlaryngosurgical excision

## **(3) Intracordal cyst:-**

- ❖ **Etiology:**
  - Mucus retention cyst: due to obstruction of the duct of mucus gland
  - Epidermoid cyst: cyst containing keratin
- ❖ **Clinical picture:**
  - **Symptoms:** Dysphonia
  - **Signs:** Unilateral, smooth swelling on the membranous vocal fold.
- ❖ **Treatment:**
  - Mucus retention cyst: Microlaryngosurgical deroofing of the cyst
  - Epidermoid cyst: Endoscopic enucleation

## **(4) Reinke's edema:-**

- ❖ **Etiology:** Persistent vocal abuse together with smoking
- ❖ **Pathology:** This → edema in the Reinke's space with mucoid material → polypoid changes
- ❖ **Clinical picture:**
  - **Symptoms:** Severe dysphonia

- **Signs:** Bilateral, symmetrical, pale, sausage like masses on the free margins of the membranous vocal folds (fig 27).

❖ **Treatment:** Microlaryngosurgical incision and aspiration of the polypoid contents

### **(5) Intubation granuloma:-**

❖ **Etiology:** Injury of the arytenoid perichondrium on the vocal process by intubation or endoscopy

❖ **Pathology:** Pressure necrosis of the mucosa of the vocal process → granulation tissue formation forming a sessile or pedunculated mass

❖ **Clinical picture:**

- **Symptoms:** - Dysphonia - Stridor if large
- **Signs:** Bilateral or unilateral, localized, firm, red, sessile or pedunculated mass attached to the vocal process

❖ **Treatment:** Conservative treatment as spontaneous regression or detachment is common; if persists → Microlaryngosurgical excision with CO<sub>2</sub> laser.

### **Pearls in bullets:**

- Vocal (singer's) nodules occur at the junction of the anterior 1/3 and posterior 2/3 of the vocal folds (middle of membranous folds). This is because this is the site of maximum contact of the vocal folds during phonation (maximum trauma).