

# Staging Supraglottic Cancer

- Accurate staging requires knowledge of true vocal cord (TVC) function, clinical & endoscopic finding
  - T1: Tumor in 1 supraglottic subsite with normal TVC mobility
- T2: Tumor invading mucosa in > 1 supraglottic subsite without laryngeal fixation
  - Extension to mucosa of base of tongue, vallecula, medial wall of pyriform sinus = T2 lesion
- T3: Endolaryngeal tumor with fixed TVC  $\pm$  invasion of PES, PGS, postcricoid hypopharynx, or inner cortex of thyroid cartilage
- T4a: Tumor invades through thyroid cartilage  $\pm$  to other extralaryngeal tissues
  - e.g., trachea, cervical soft tissues, strap muscles, thyroid gland, esophagus
- T4b: Tumor invades prevertebral space, encases carotid artery, or invades mediastinal structures

# Treatment

- **T1/T2** (smaller tumors): Laser surgery or XRT only
  - Speech-preserving partial laryngectomy may be used for isolated supraglottic lesions, without TVC fixation
- **T3**: Small proportion may have laser resection or partial laryngectomy
- **T3/T4a** (larger tumors): XRT & chemotherapy
- **T4a**: Extralaryngeal extension or through thyroid cartilage = total laryngectomy
- **T4b**: Palliative nonsurgical treatment

## **Staging Supraglottic Cancer**

### **Determined by:**

- Subsite(s) involved: supra- or infrahyoid epiglottis, AE folds, FVC, arytenoids**
- Cord mobility**
- Submucosal spread**
- Extra-laryngeal spread**

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# Staging Supraglottic Cancer

## Staging Supraglottic Cancer

- T1 - 1 subsite, normal TVC mobility
- T2 - 2 or more subsites SG or glottis or adjacent pharynx, NL TVC mobility
- T3 - Limited to larynx with TVC paralysis; PES, PGS, piriform sinus, postcricoid spread, inner cortex thyroid cartilage
- T4a - Thyroid cartilage invasion, extra-laryngeal spread
- T4b – Invades prevertebral space, carotid

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## Submucosal Spaces

- **Pre-epiglottic space**
  - fat, lymphatics, glandular tissue
- **Paraglottic space**
  - fat, lymphatics, small muscles
- **Perivertebral space**
  - fascia, longus capitus/colli mm

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# Submucosal Spaces Significance

- Pre-epiglottic invasion
  - Supraglottic laryngectomy
- Paraglottic invasion
  - Partial or total laryngectomy
- Prevertebral muscle invasion
  - Often inoperable - piriform sinus CA

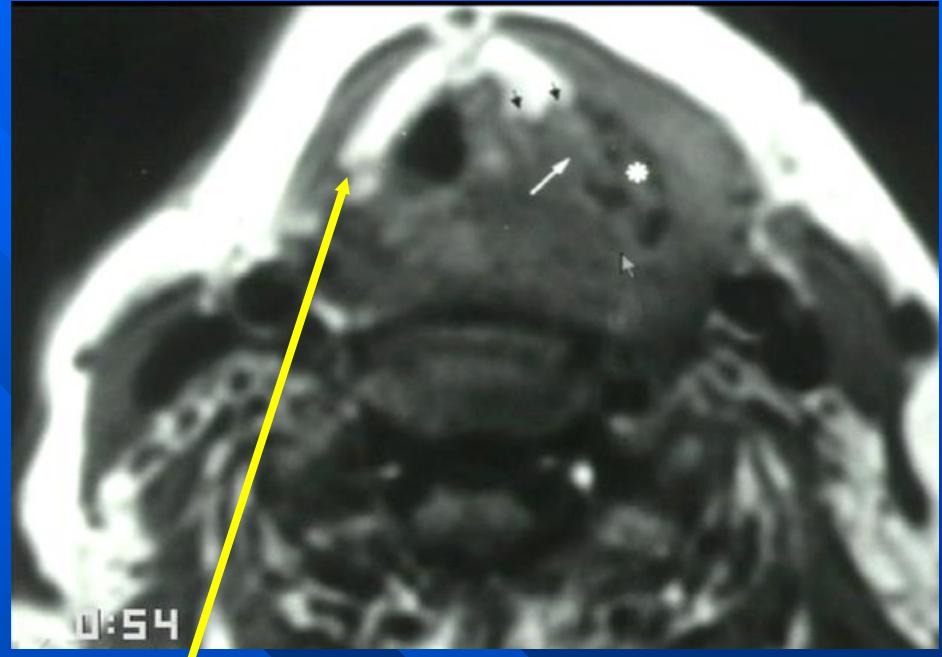
## Supraglottic Laryngectomy

- Resect epiglottis, AE folds, false vocal cords, pre-epiglottic fat
- Contraindications:
  - Tumor to or below laryngeal ventricle
  - Extension to anterior commissure
  - T4 lesions
  - Bilat. arytenoid invasion/fixation
  - Bilat. base of tongue tumor

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# Large Tumor

- If tumor large and tumor surrounds thyroid cartilage, likely started in pyriform sinus, not supraglottic :AE folds may involve, but will not surround



Thyroglottic Ligament