Hypopharynx

- Caudal continuation of pharyngeal mucosal space, between oropharynx & esophagus
- Pyriform sinus:
- Posterior pharyngeal wall:
- Post-cricoid region

Primary Tumor Sub sites in Hypopharynx

- Pyriform sinus (65%)
- Post-cricoid HP (20%)
- Posterior wall HP (15%)

Clinical Importance

- HP poorly seen on clinical exam (unlike OP & NP)
- Clinically occult SCCa may hide here, presenting as neck nodes without visible primary tumor
- Radiologist provides essential staging information, often upstaging clinical stage

SCCa, Pyriform Sinus



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Axial CECT in a 65-year-old man with extensive smoking history and sore throat demonstrates soft tissue mass filling right pyriform sinus \rightarrow . Mass appears superficially spreading, involving all walls of sinus but not spreading anteriorly to paraglottic fat \rightarrow or laterally into thyroid cartilage \diamondsuit .

Adenopathy & "unknown primary"

Consider 4 key sites

- Apex of pyriform sinus of hypopharynx
- Palatine tonsils of oropharynx
- Lingual tonsil of oropharynx (base of Tounge)
- Lateral pharyngeal recess of nasopharynx

CT Findings

- Anterior: Tends to spread into paraglottic fat
- Lateral: Spreads to parapharyngeal tissues (T4a)
 - May infiltrate through thyrohyoid membrane
 - Look for thyroid cartilage invasion (T4a)
 - Look for carotid involvement (T4b), suggested by > 270° encasement
- Posterior: May invade prevertebral tissues (T4b); imaging can exclude this but is not accurate for predicting it.
- Superior extension often occurs to oropharynx
- Note aryepiglottic(AE) fold SCCa is considered supraglottic laryngeal SCCa, with different staging

SCC

- When HP SCCa present, secretion & airway problems limit patient's ability to hold still for MR
- CECT may be better 1st exam
- MR may better determine infiltration of prevertebral muscles, which is T4b stage SCCa