

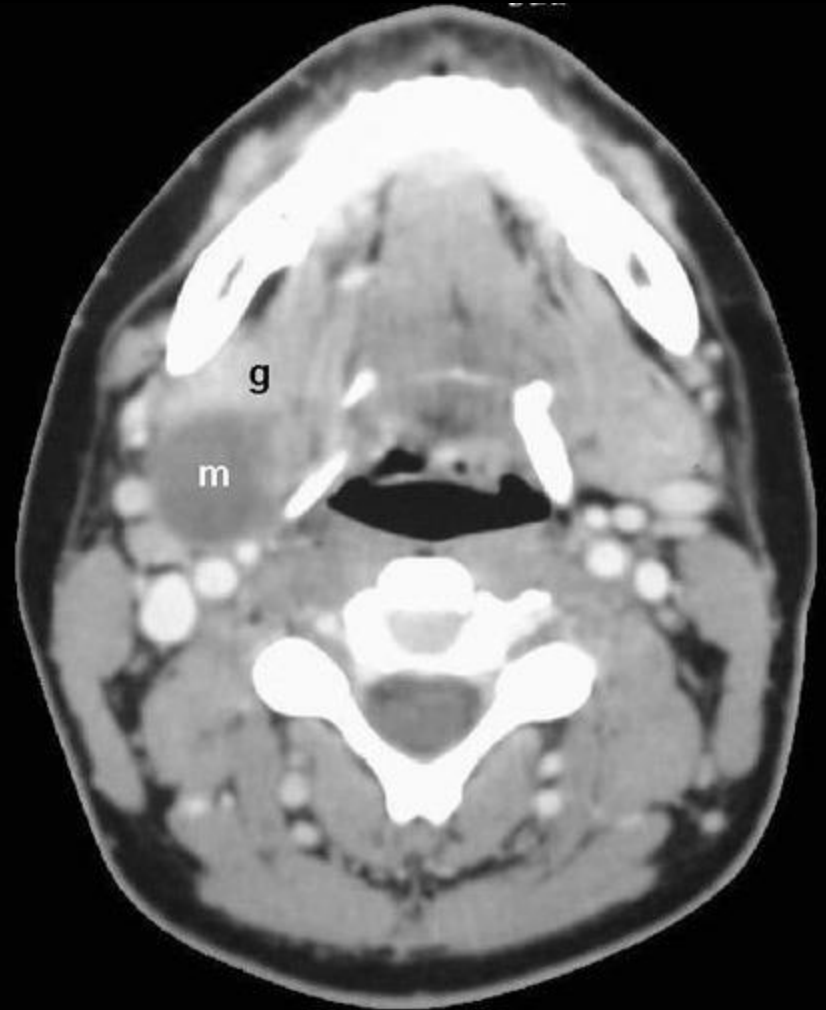
First branchial cleft cyst, type I

- cystic mass in the parotid gland (arrow) that is connected with a smaller cyst in the external auditory canal at the osseocartilaginous junction (arrowhead).



First branchial cleft cyst, type II

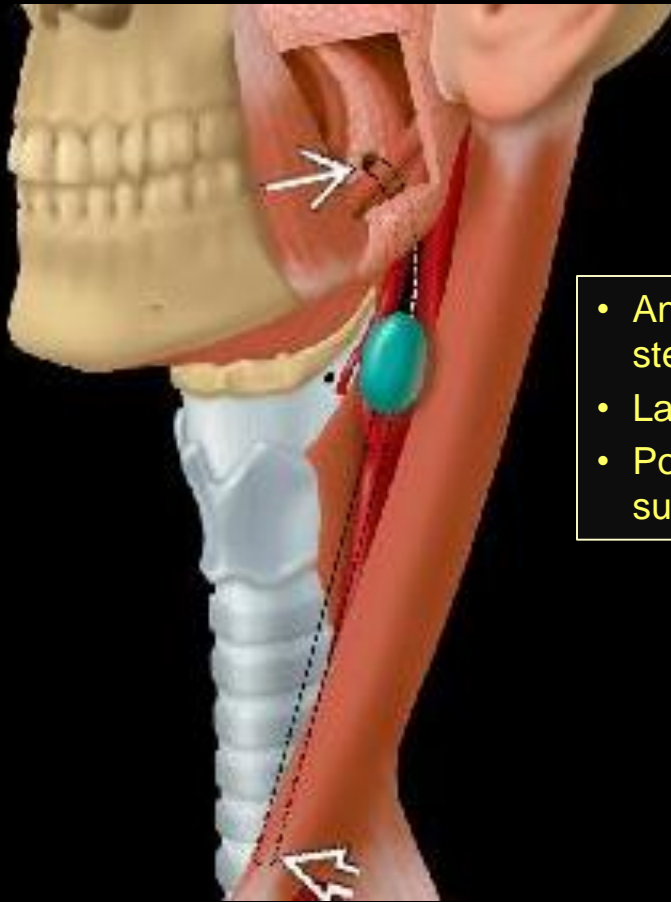
- ill-defined, nonenhancing, water attenuation mass (m) posterior to the right submandibular gland



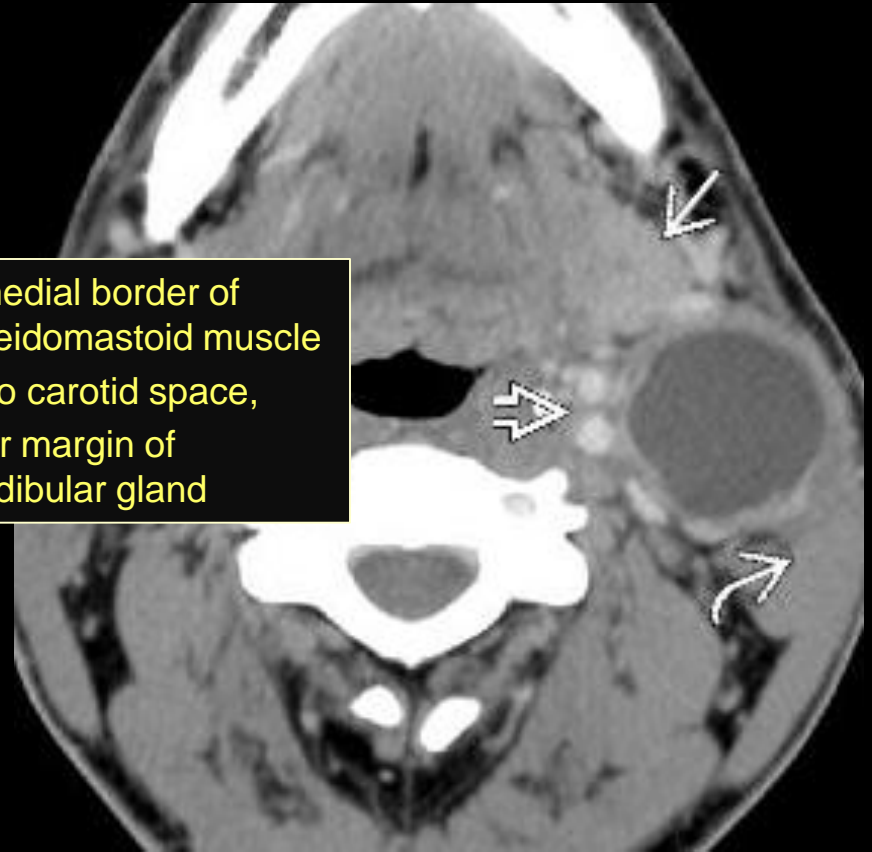
First branchial cleft cyst

- Type I cysts
 - are located near the external auditory canal.
 - Most commonly, they are inferior and posterior to the tragus (base of the ear), but they may also be in the parotid gland or at the angle of the mandible.
 - Type I cysts may be difficult to distinguish from a solid parotid mass on clinical examination.
- Type II cysts are
 - associated with the submandibular gland or found in the anterior triangle of the neck

Second branchial cleft cyst



- Anteromedial border of sternocleidomastoid muscle
- Lateral to carotid space,
- Posterior margin of submandibular gland



- 2nd BCC > 1st BCC > 3rd BCC & 4th BC

Second branchial cleft cyst

- 95% of all branchial cleft anomalies arise from second cleft.
- Classically, cyst located at anteromedial border of sternocleidomastoid muscle, lateral to carotid space, and at posterior margin of submandibular gland
- May occur anywhere along a line from the oropharyngeal tonsillar fossa to the supraclavicular region of neck

3rd branchial cleft cyst

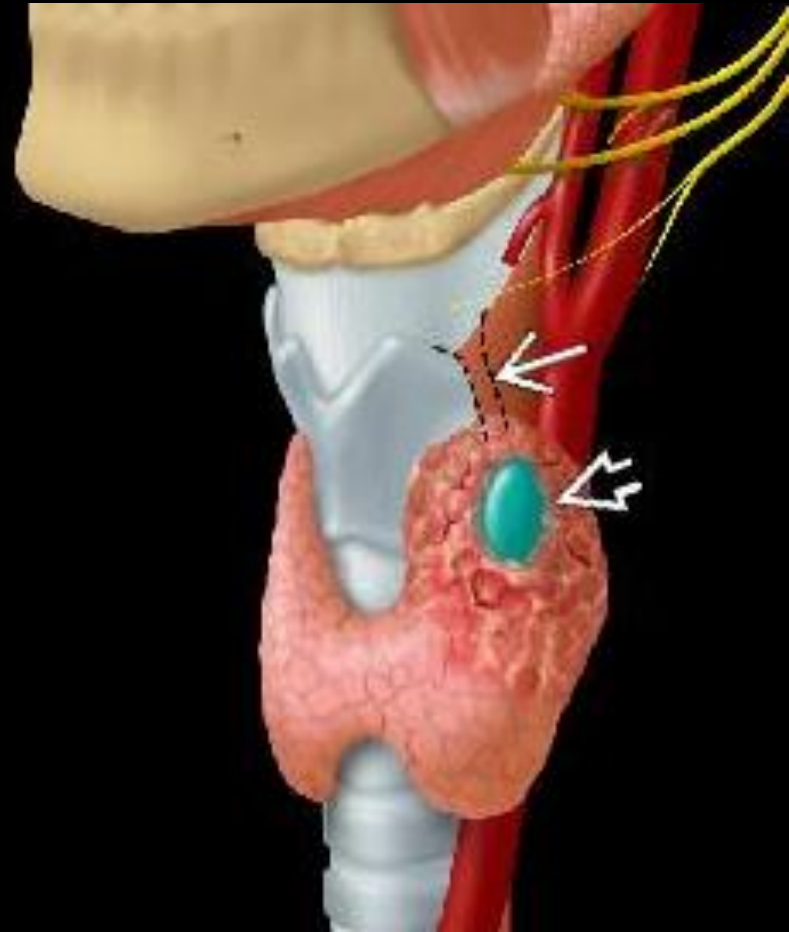
- Best diagnostic clue:
Unilocular thin-walled cyst in
posterior cervical space
(posterior triangle)
- May contain air if cyst
communicates with pyriform
sinus via patent tract (3rd
pharyngeal pouch derivative).
- Sternocleidomastoid
muscle laterally (high
cervical neck) or
posterolaterally (low
cervical neck) displaced



- 3rd branchial cleft
anomalies account for
only 3% of all
branchial anomalies

4th branchial cleft cyst

- Best diagnostic clue:
Unilocular thin-walled
cyst in superior lateral
aspect of LEFT thyroid
lobe with associated
thyroiditis



4th branchial cleft cyst

- May occur anywhere from LEFT pyriform sinus apex to thyroid lobe
- Commonly against or within superior aspect of the LEFT lobe of thyroid gland or attached to thyroid cartilage
- Upper end may communicate with or be adherent to pyriform sinus

