



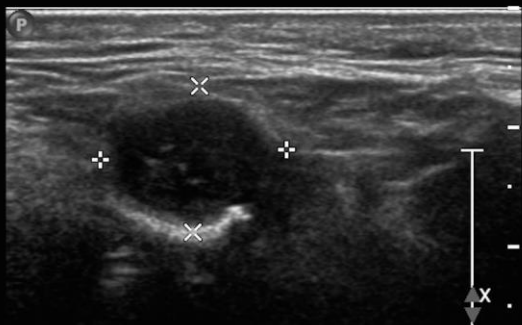
47 M with 2 months of left jaw pain with
manual pressure

Melanie Chang
6/16/2017

3/29/2017

FR 24Hz

RS
Z 1.4
2D
78%
C 53
P Med
Res



5.0

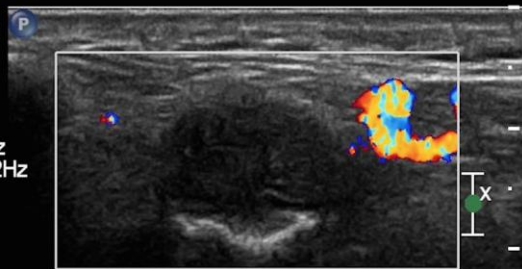
✦ Dist 1.56 cm
✕ Dist 1.23 cm

LT INFERIOR TO JAW TR

FR 9Hz

RP
Z 1.4
2D
90%
C 49
P Med
Res

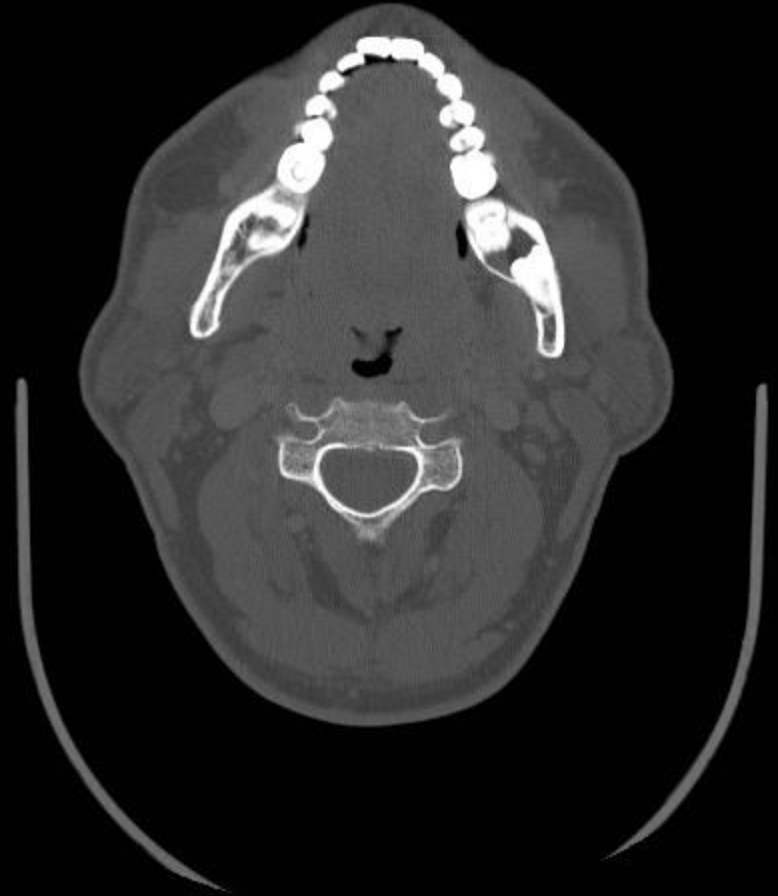
CF
79%
402Hz
WF 22Hz
Low

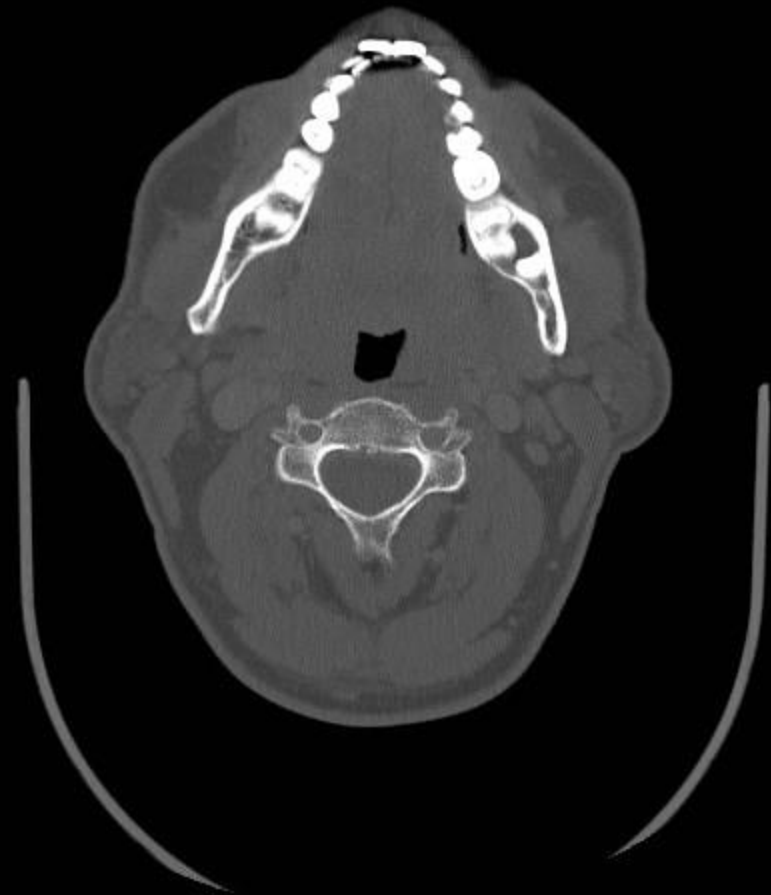


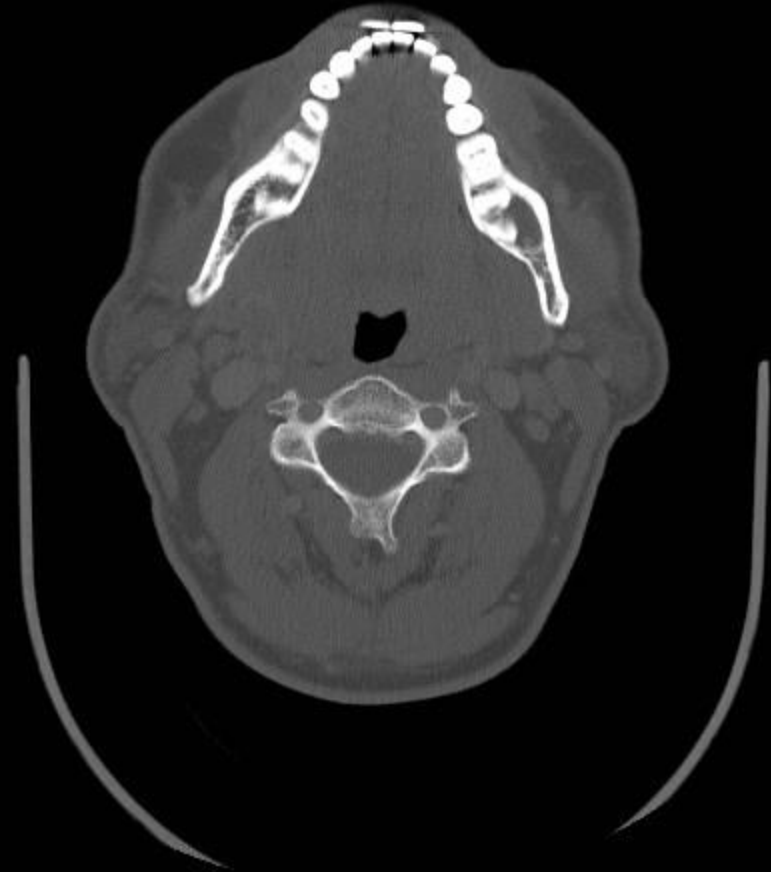
4.5

LT INFERIOR TO JAW Long

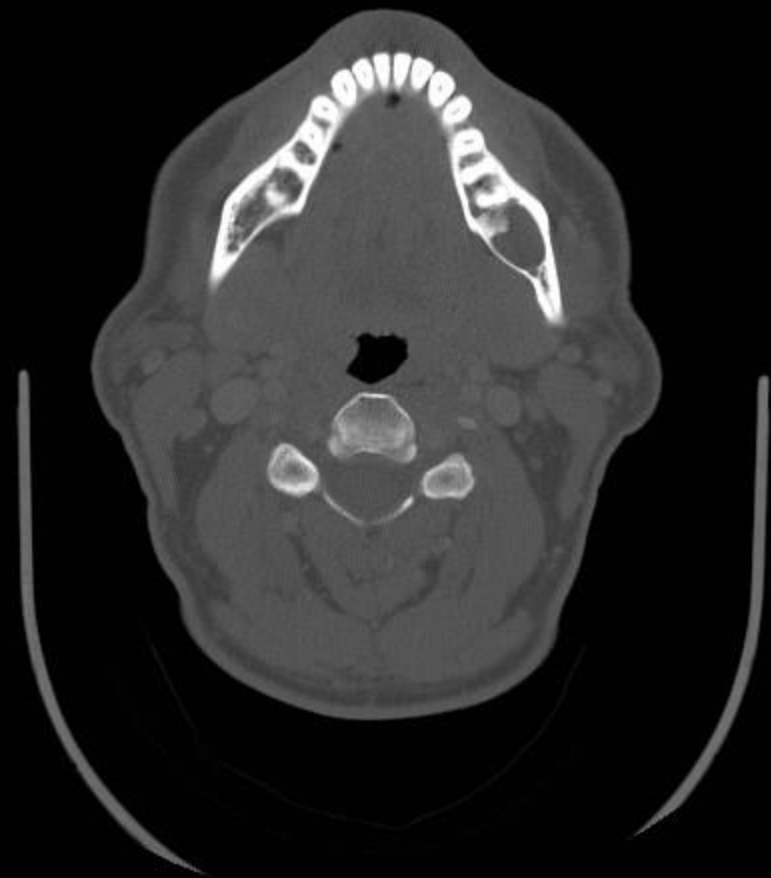
5/1/2017





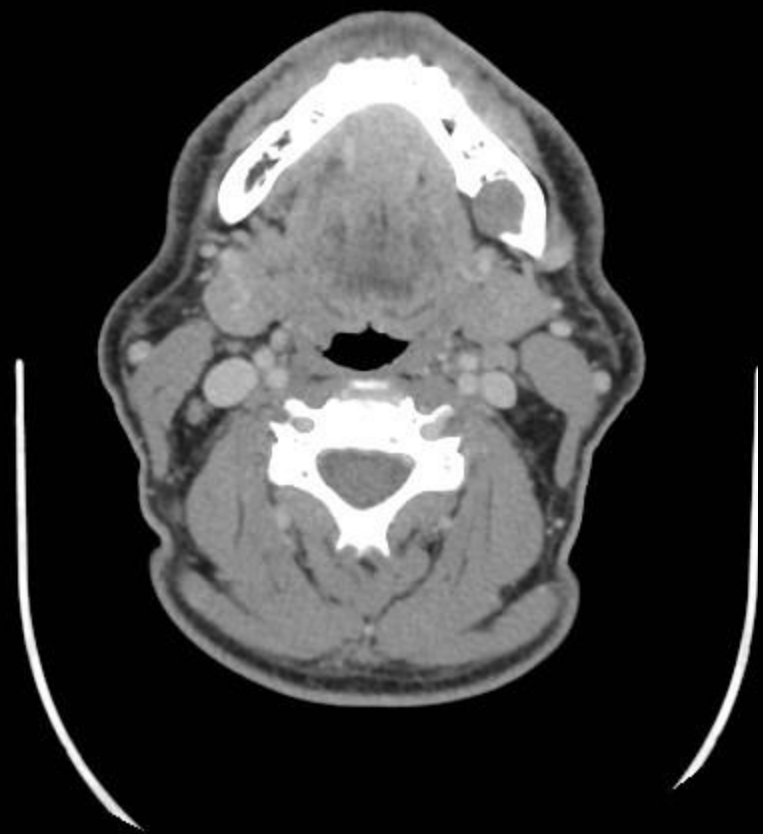


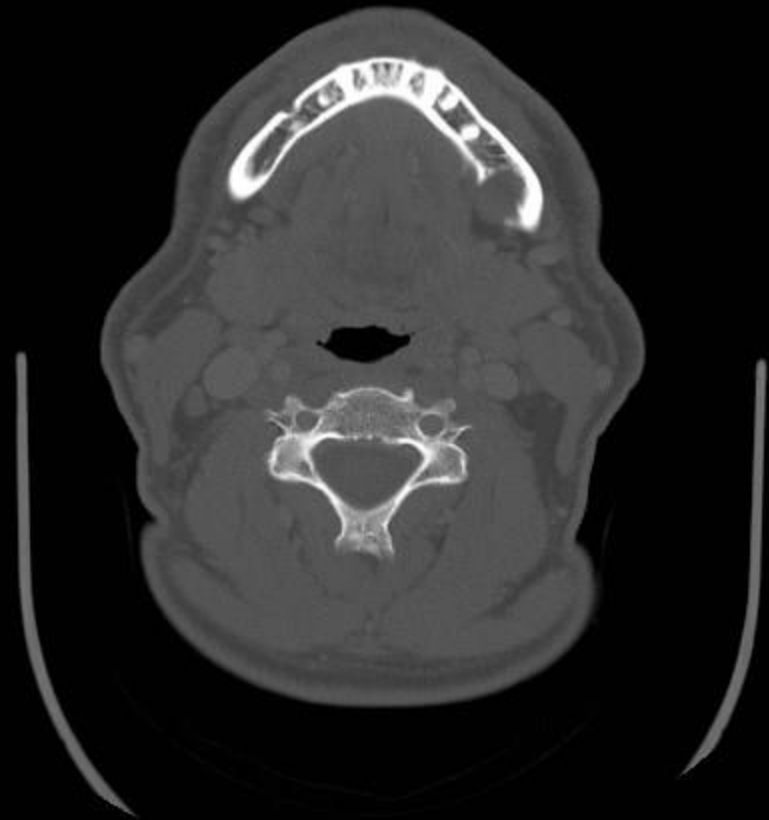
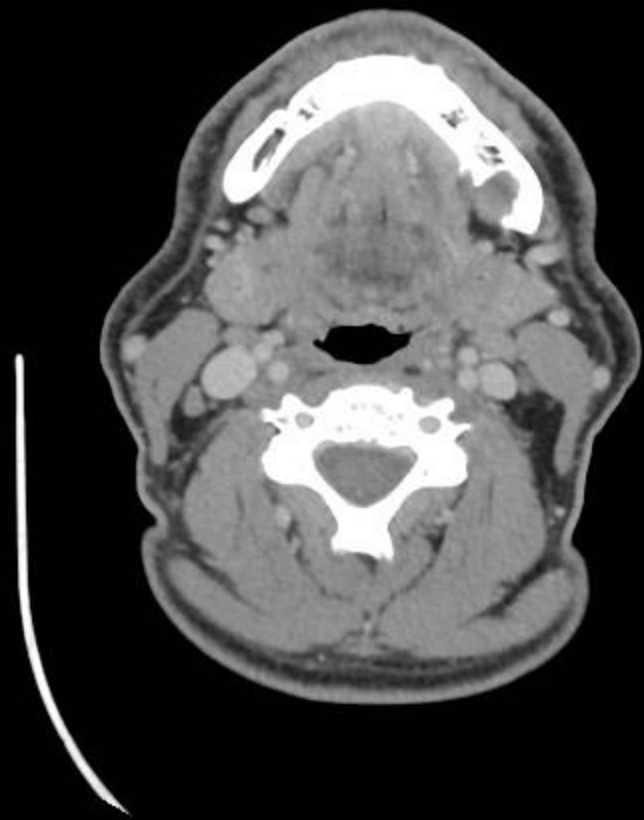


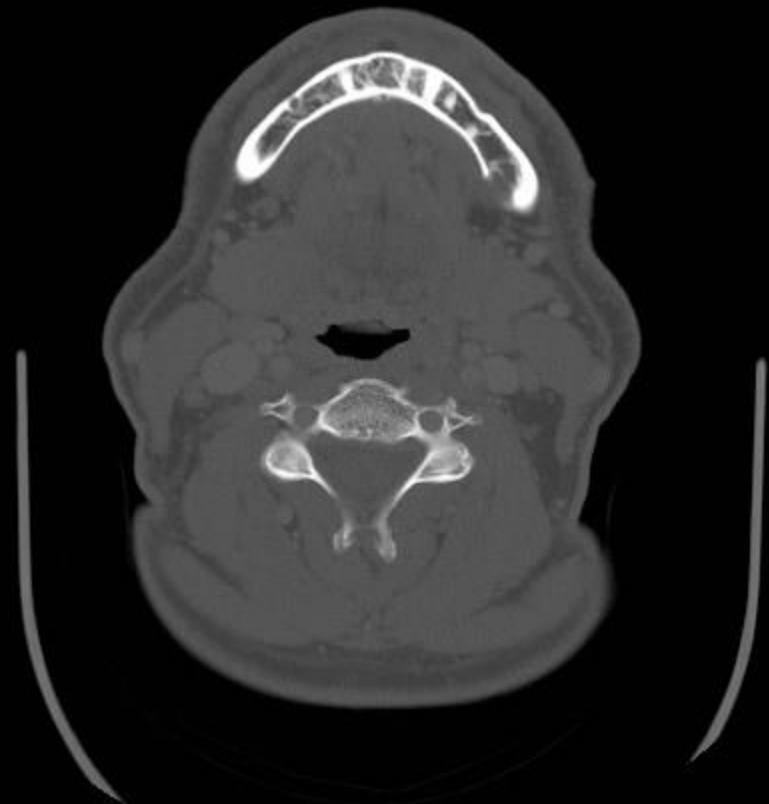
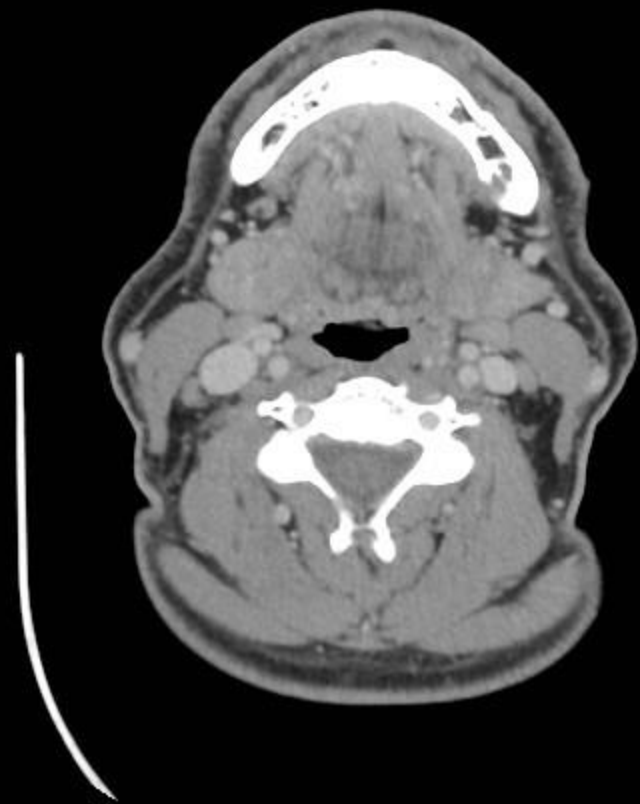


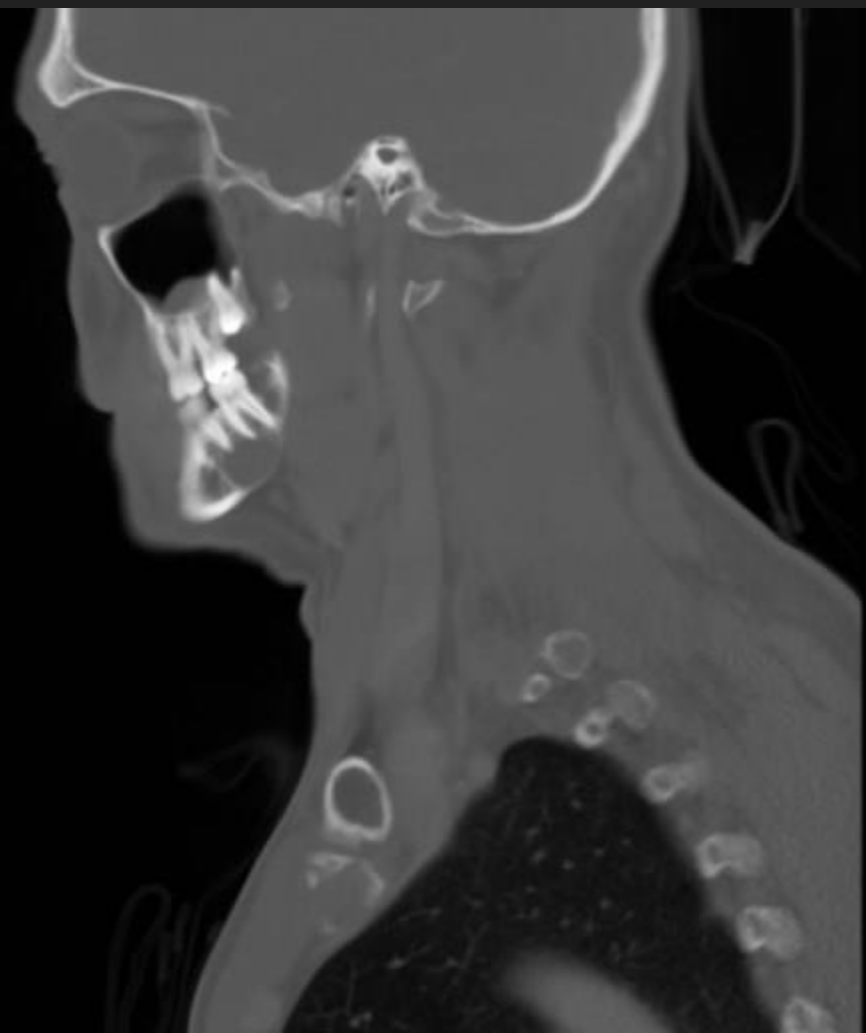
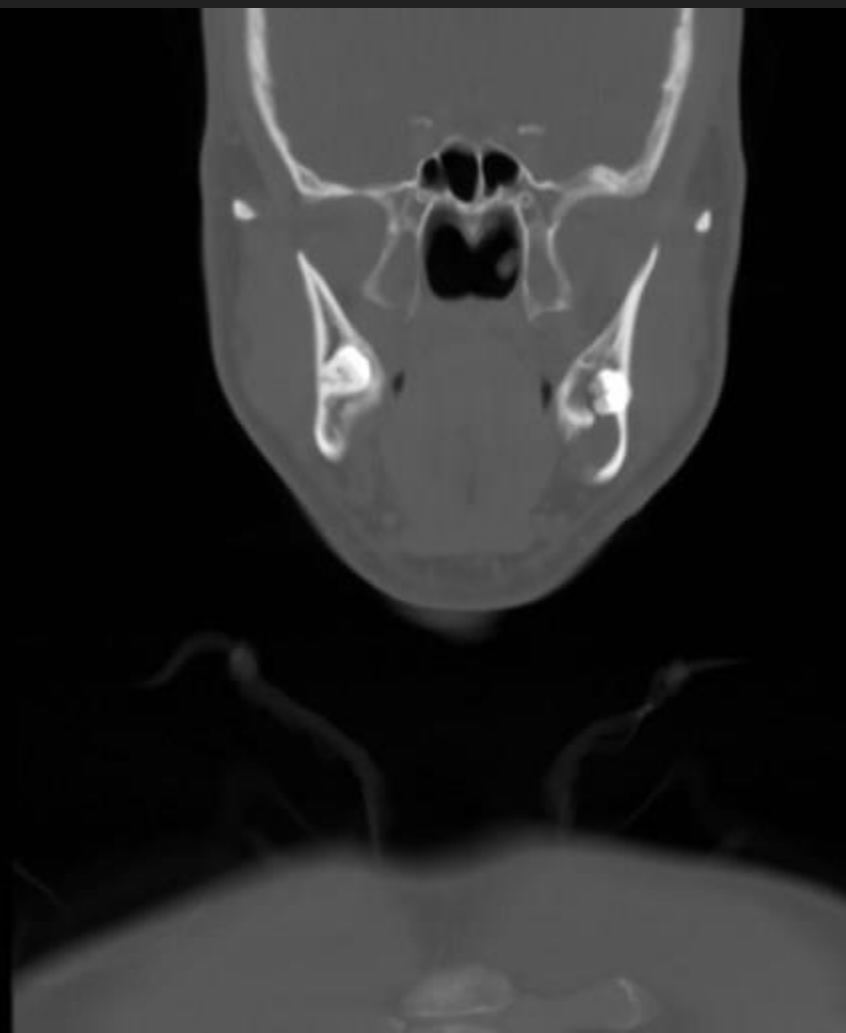




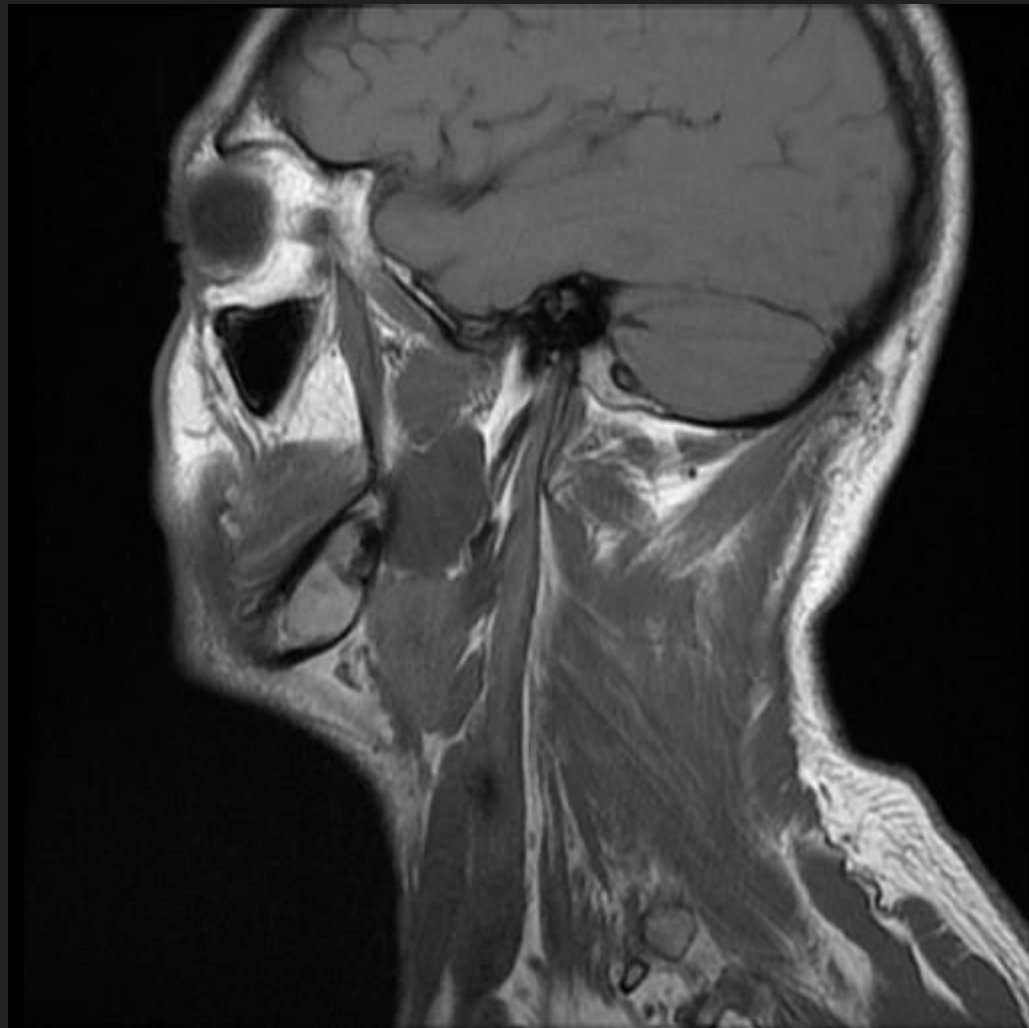




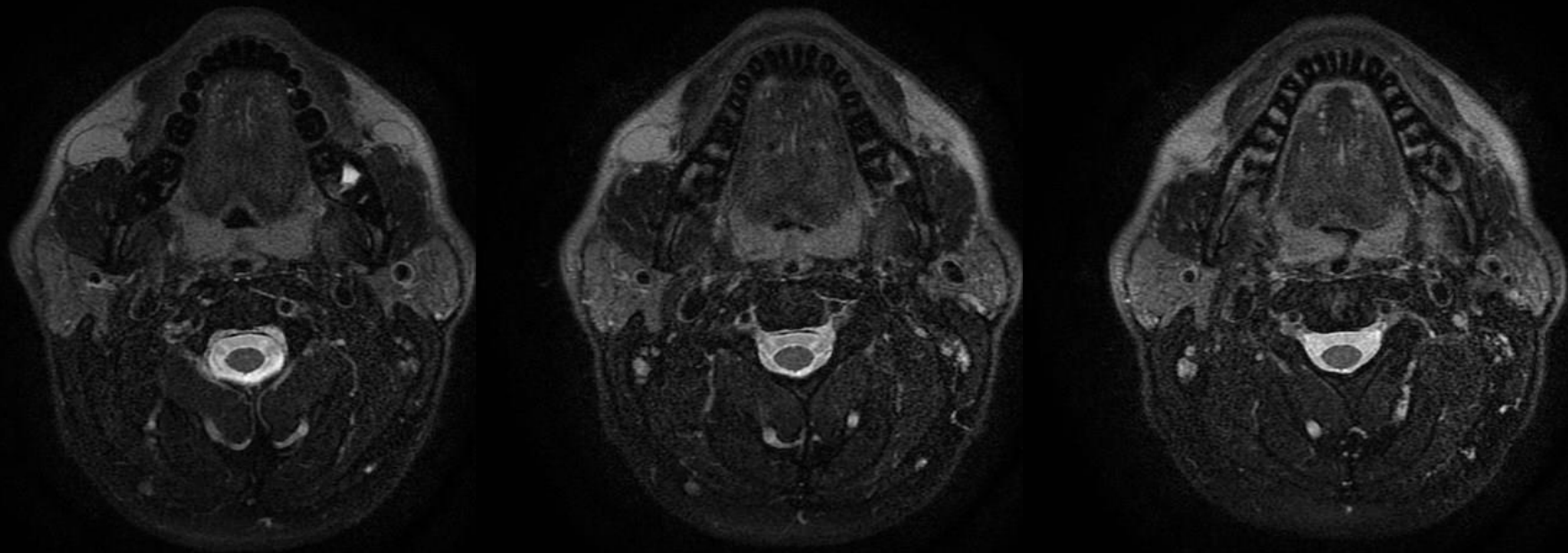




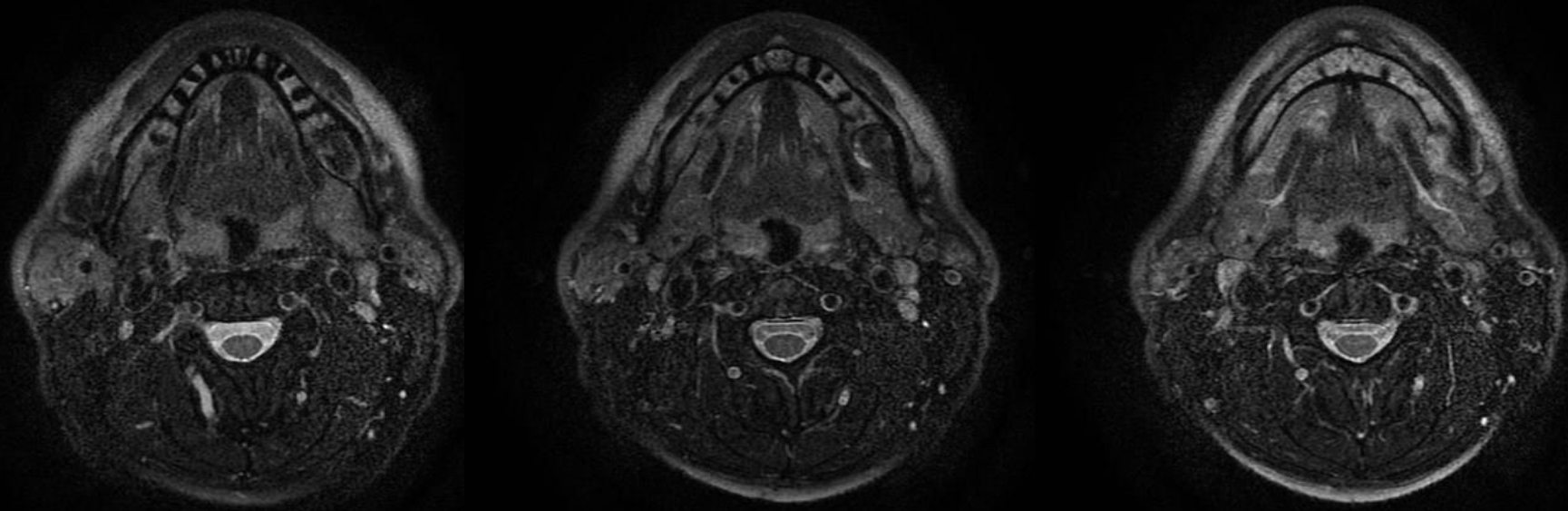
5/25/2017



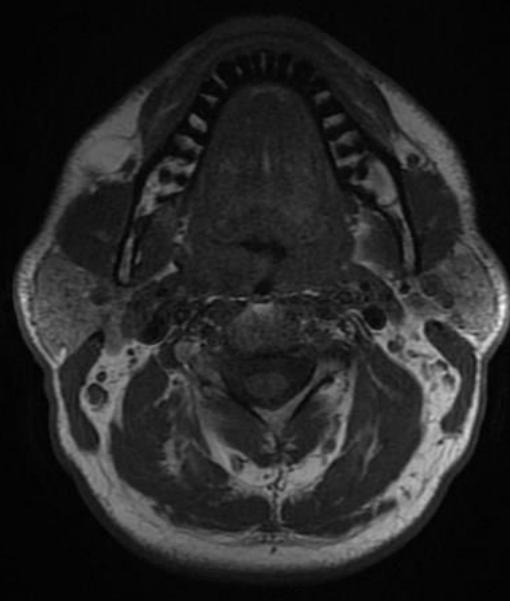
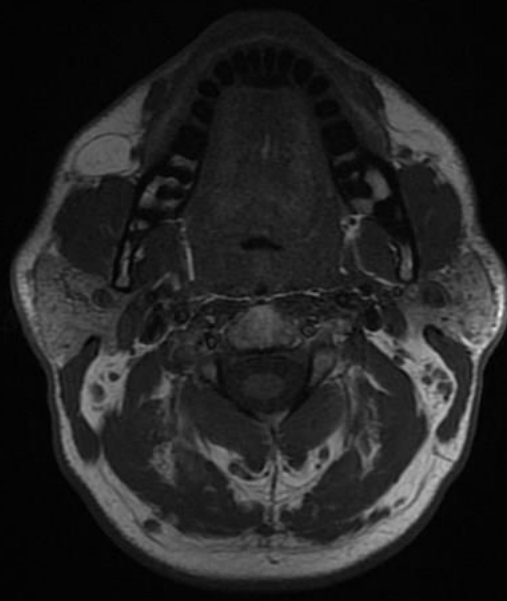
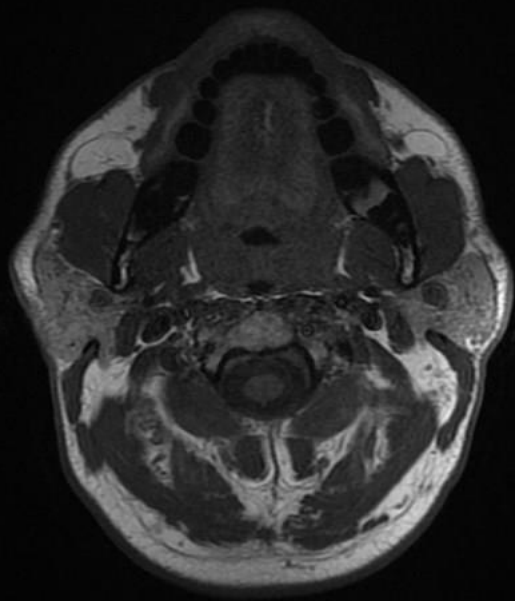
T1



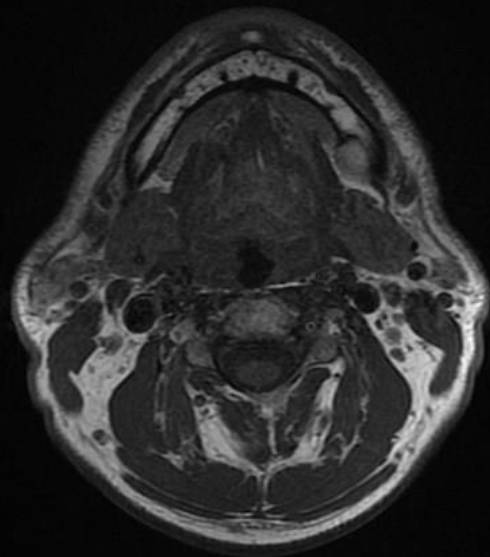
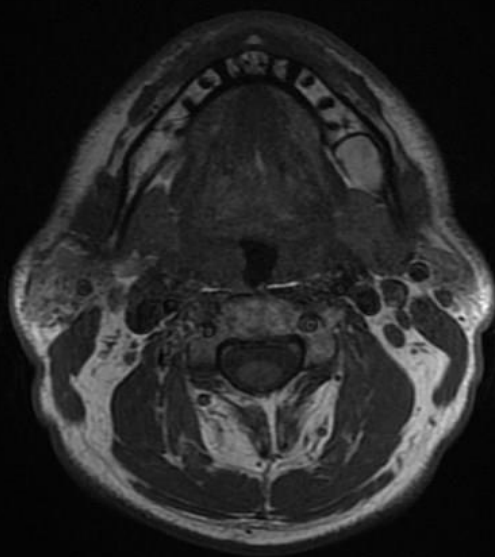
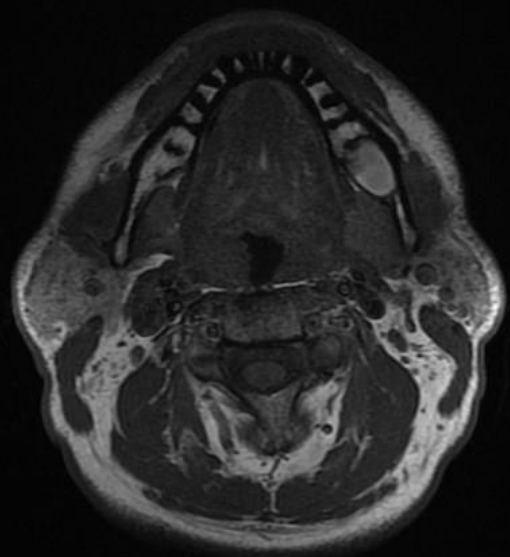
T2 fat sat



T2 fat sat



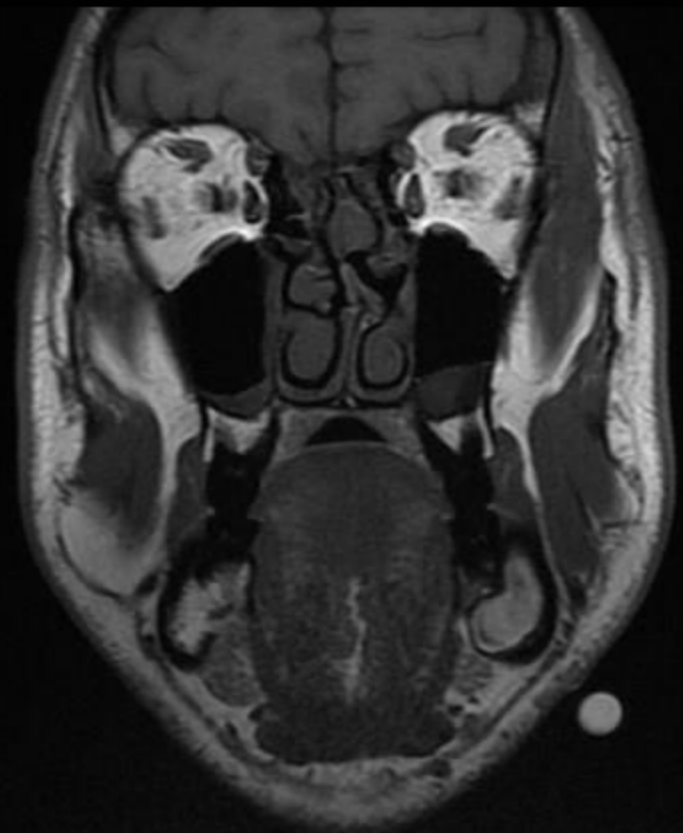
T1 pre



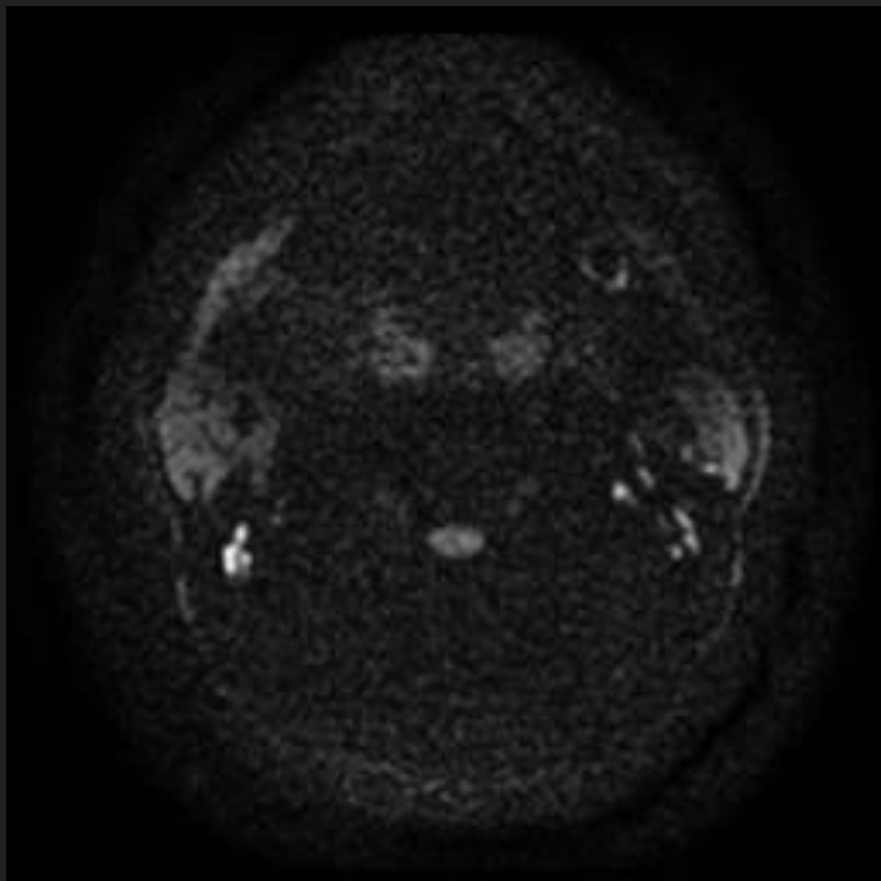
T1 pre



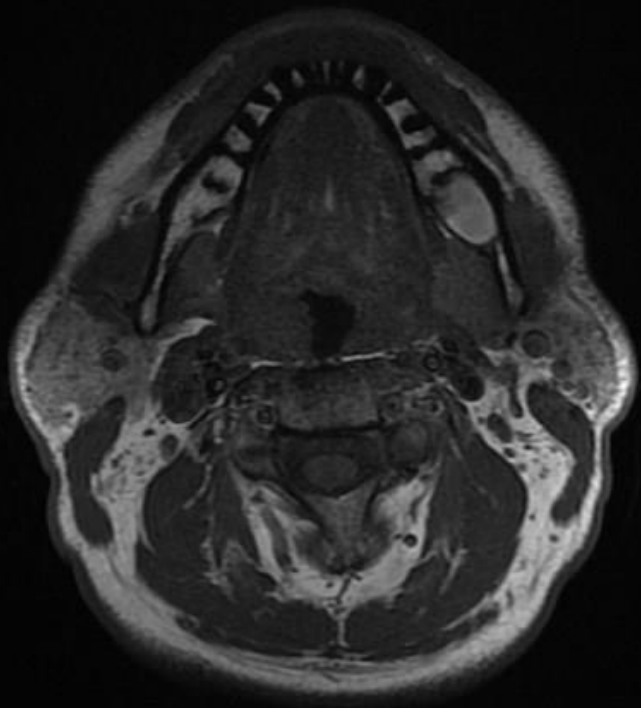
T2 fat sat



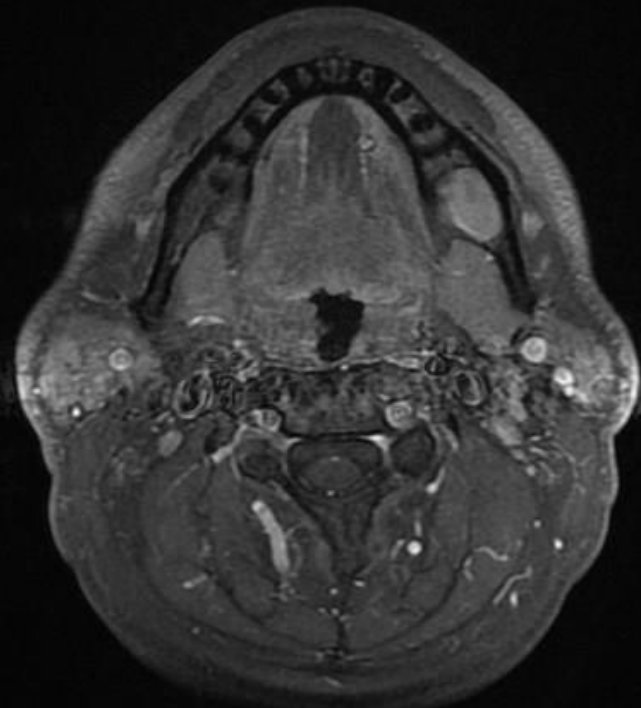
T1 pre



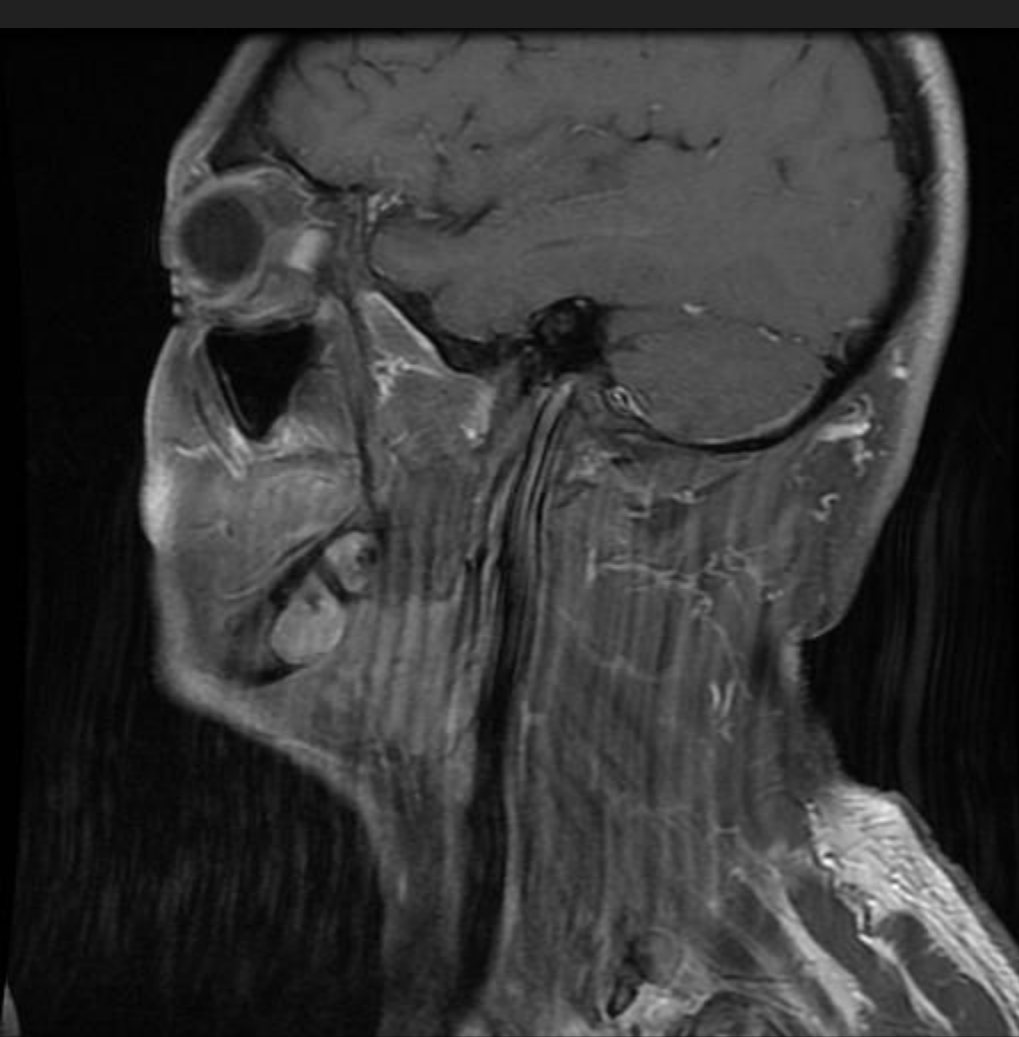
DWI



T1 pre



T1 fat sat post



T1 fat sat post

DDX

Ameloblastoma

Keratocystic odontogenic tumor

Odontogenic myxoma

Central giant cell granuloma

Dentigerous cyst

Ameloblastoma

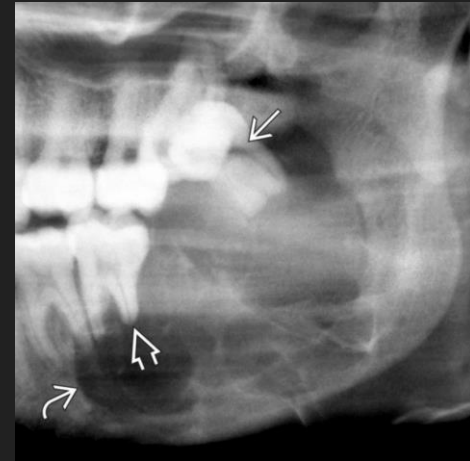
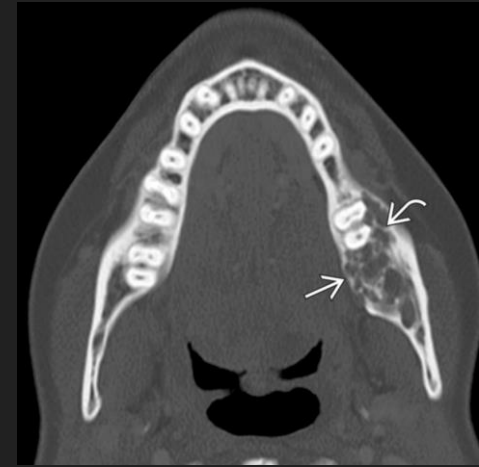
Benign but locally aggressive neoplasm arising from odontogenic epithelium

Multicystic/solid subtype most common

Slow growing, present in 3rd to 5th decades

Occur near the angle of mandible in region of 3rd molar tooth

If maxilla involved, tumor located in premolar region and can extend into maxillary sinus



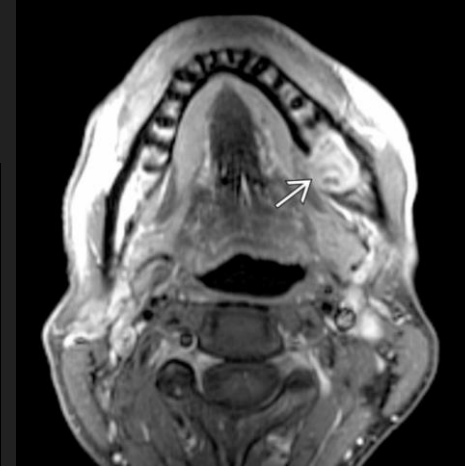
Ameloblastoma imaging

Well-defined, expansile “soap-bubble” lesion, no matrix calcification

Pericoronar relationship to impacted and displaced molar tooth

Can erode cortex and cause resorption of adjacent teeth roots

Strong enhancement of solid tumor components and cyst wall



Ax T1 +C

Keratocystic odontogenic tumor

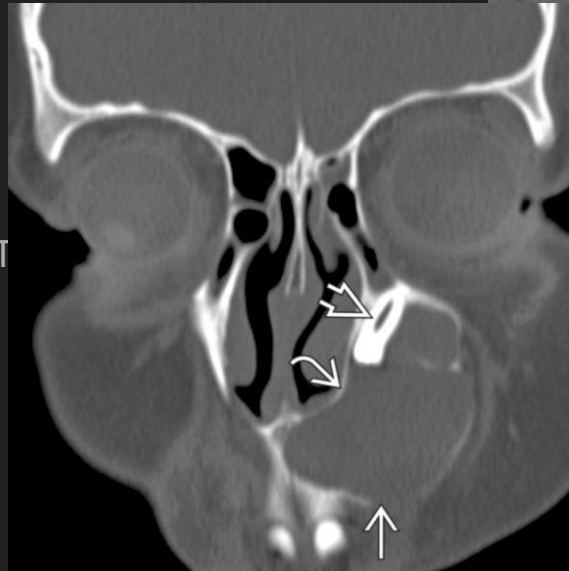
Odontogenic cyst with aggressive behavior and high recurrence rate

Arises from dental lamina

Present in 2nd to 4th decades

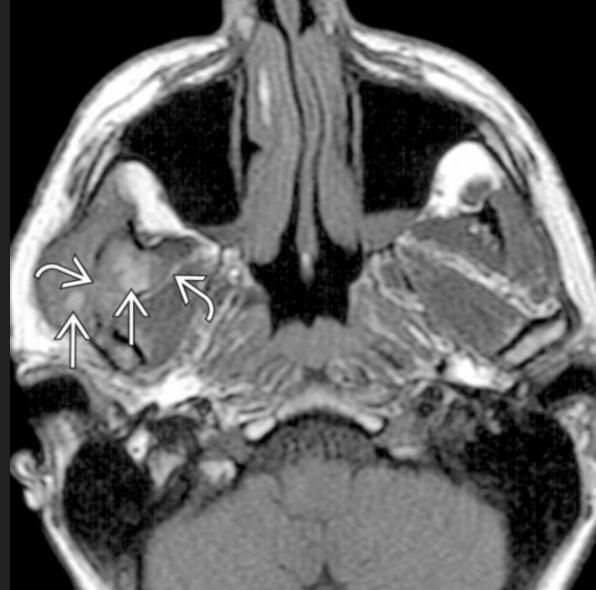
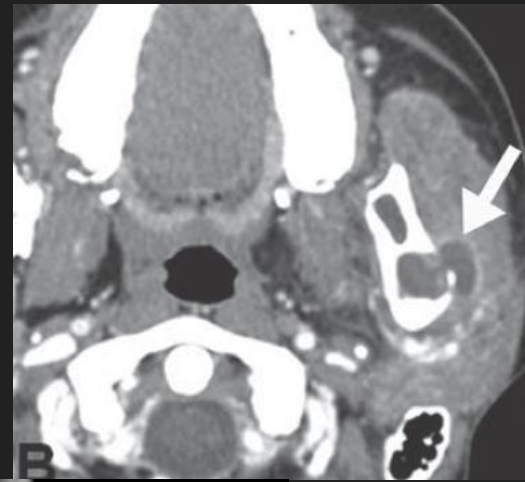
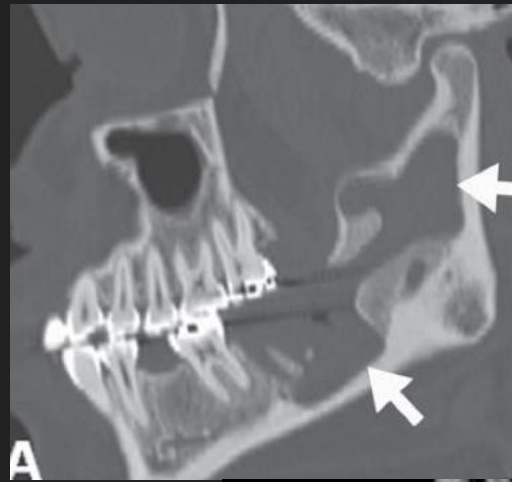
Often associated with unerupted tooth

Majority are solitary, 5-10% of cases multiple KOT may be associated w basal cell nevus syndrome



KOT imaging

- Posterior mandible, 3rd molar region
- Well-defined cystic or scalloping shape
- Usually unilocular
- More growth along length of bone in body of mandible
- Tooth displacement and root resorption
- No solid enhancement but may have thin enhancing rim
- Restricts diffusion from increased viscosity
- High T1 from cholesterol and keratin



Ax T1

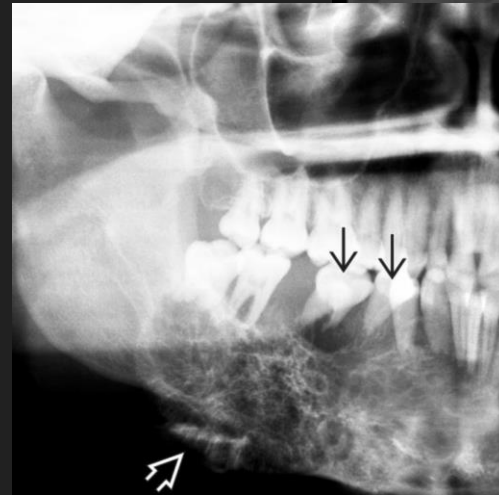
Odontogenic myxoma (myxofibroma)

Uncommon benign tumor of odontogenic ectomesenchyme

2nd to 3rd decades

Imaging:

- Mandible > maxilla, premolar-molar regions
- Multilocular radiolucency with thin internal septa
- May be well defined or ill defined
- Less bony expansion than ameloblastoma
- Greater extension between roots without resorption



Central giant cell granuloma

Benign nonodontogenic reactive intraosseous lesion of jaw

3rd to 5th decade

Imaging:

Expansile lesion, poorly corticated periphery

Loculated with granular, wispy septa

Mandible > maxilla, anterior to 1st molar

Root resorption

T1/T2WI hypo-isointense

Heterogeneous enhancement



Dentigerous cyst

Benign developmental jaw cyst associated with crown of unerupted/impacted tooth

Imaging:

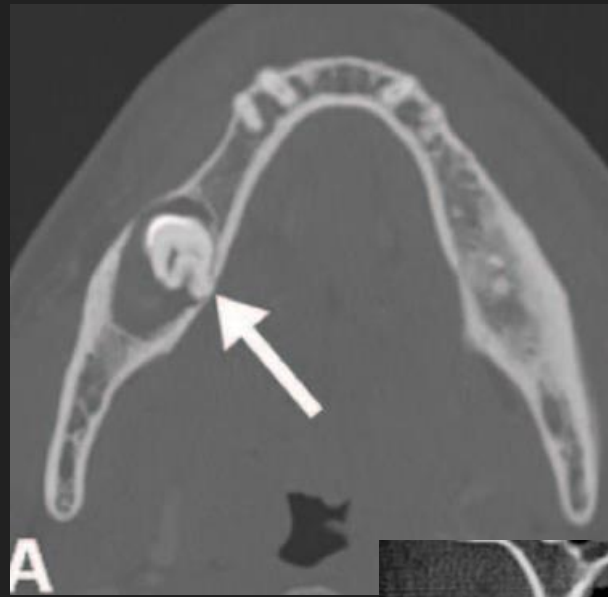
Well-circumscribed, usually corticated expansile unilocular radiolucency in pericoronal location

Mandibular 3rd molar > maxillary 3rd molar > maxillary canines

Size greater than normal follicular space (3mm)

Uncommonly resorbs roots

No enhancing mural nodule



References

Dunfee BL, et al. Radiologic Pathologic Characteristics of Benign and Malignant Lesions of the Mandible. *RadioGraphics* 2006; 26:1751-1768.

Devenney-Cakir, et al. Cystic and Cystic-Appearing Lesions of the Mandible: Review. *AJR* 2011; 196:66-77.

Statdx