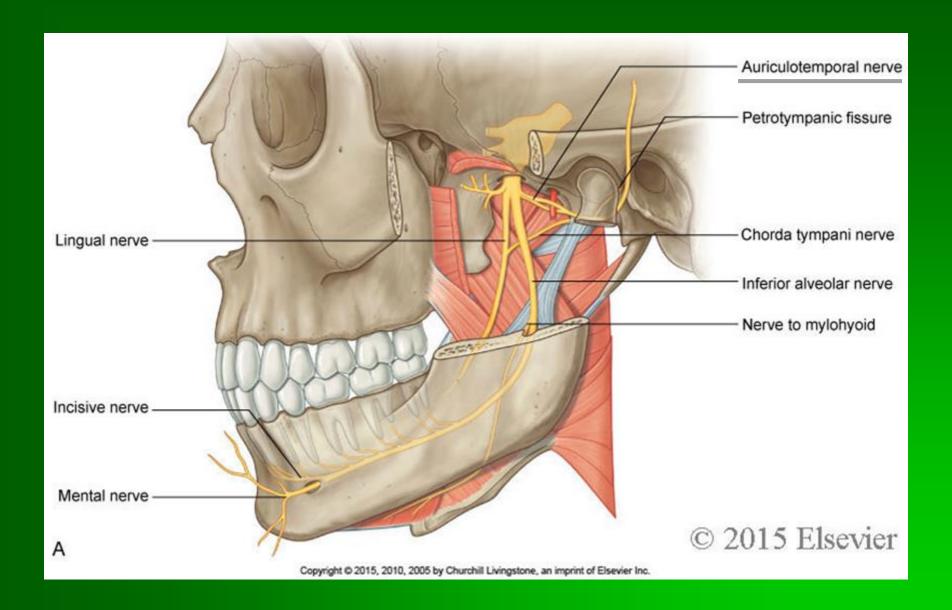
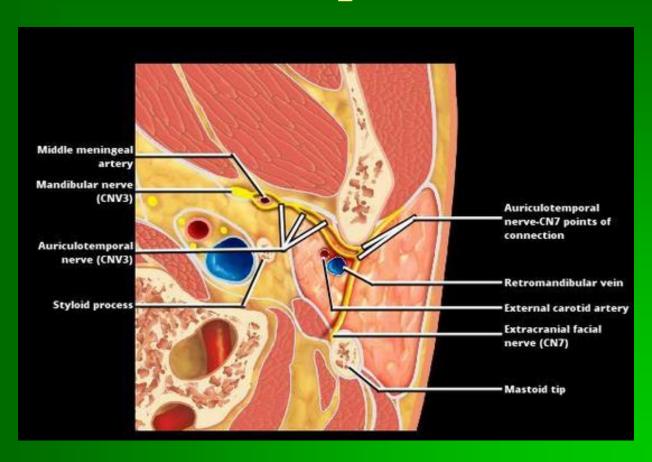
## Auriculotemporal nerve

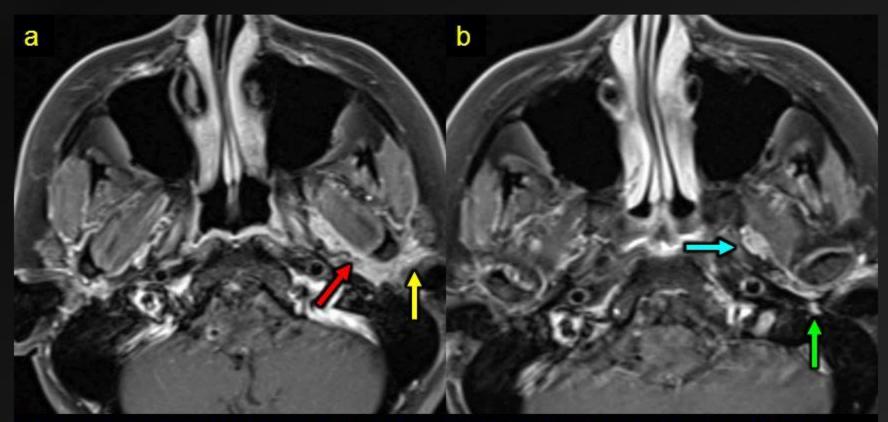
- Malignant tumors involving either CNV3 within the masticator space or CN7 within the parotid space may spread across this auriculotemporal nerve "bridge" in either direction.
- Auriculotemporal nerve is a sensory branch of CNV3 that splits around the middle meningeal artery, then splits again within the parotid to finally anastomose with the facial nerve.
- Patients with auriculotemporal nerve perineural tumor involvement present with both trigeminal and facial neuropathies.



## Auriculotemporal nerve



## Perineural Tumor



Adenoid cystic carcinoma with PNT. (a) Axial T1WI +C FS shows enhancement along intraparotid CN7 ( ), extending along the auriculotemporal nerve ( ) connecting CN7 & V3. (b) Abnormal enhancement involves the mastoid segment of CN7 ( ) at the stylomastoid foramen and CN V3 ( ) in the masticator space.