

Imaging

- Imaging appearance based on histologic grade
 - **Low-grade MECa:** Well-circumscribed, heterogeneous parotid space (PS) mass
 - **High-grade MECa:** Invasive, ill-defined PS mass with associated malignant nodes
- If lesion high grade, infiltrative, or near stylomastoid foramen, **perineural spread** on CNVII may occur
- High-grade MECa often has **nodal metastases**
- MR findings
 - Areas of **low T2 signal** are characteristic but not pathognomonic
 - T1 C+ shows heterogeneous tumor enhancement
 - Enhanced images may "hide" lesion
 - MR useful for extent of lesion & facial nerve **perineural spread**

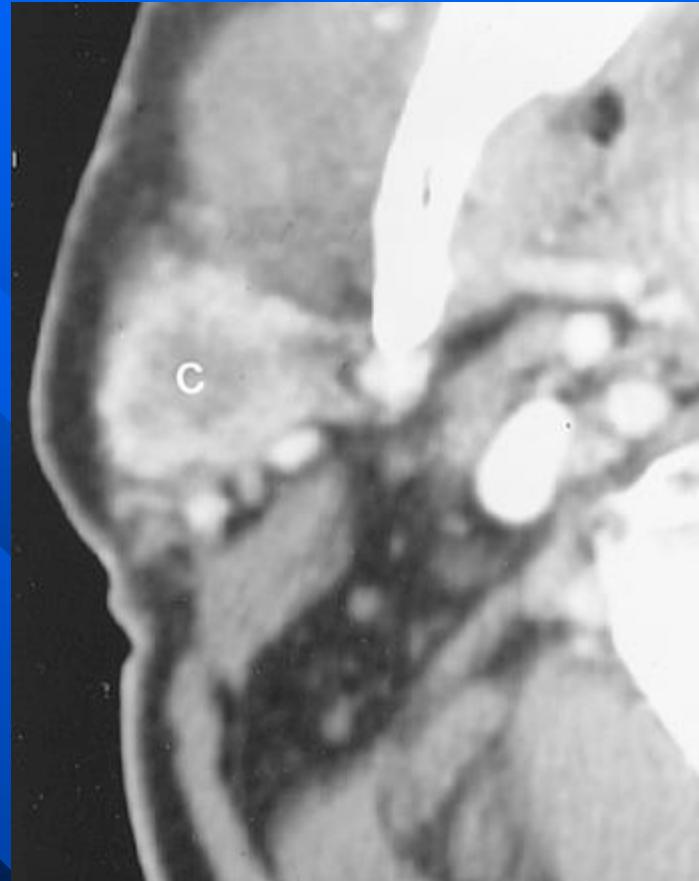
Mucoepidermoid carcinoma

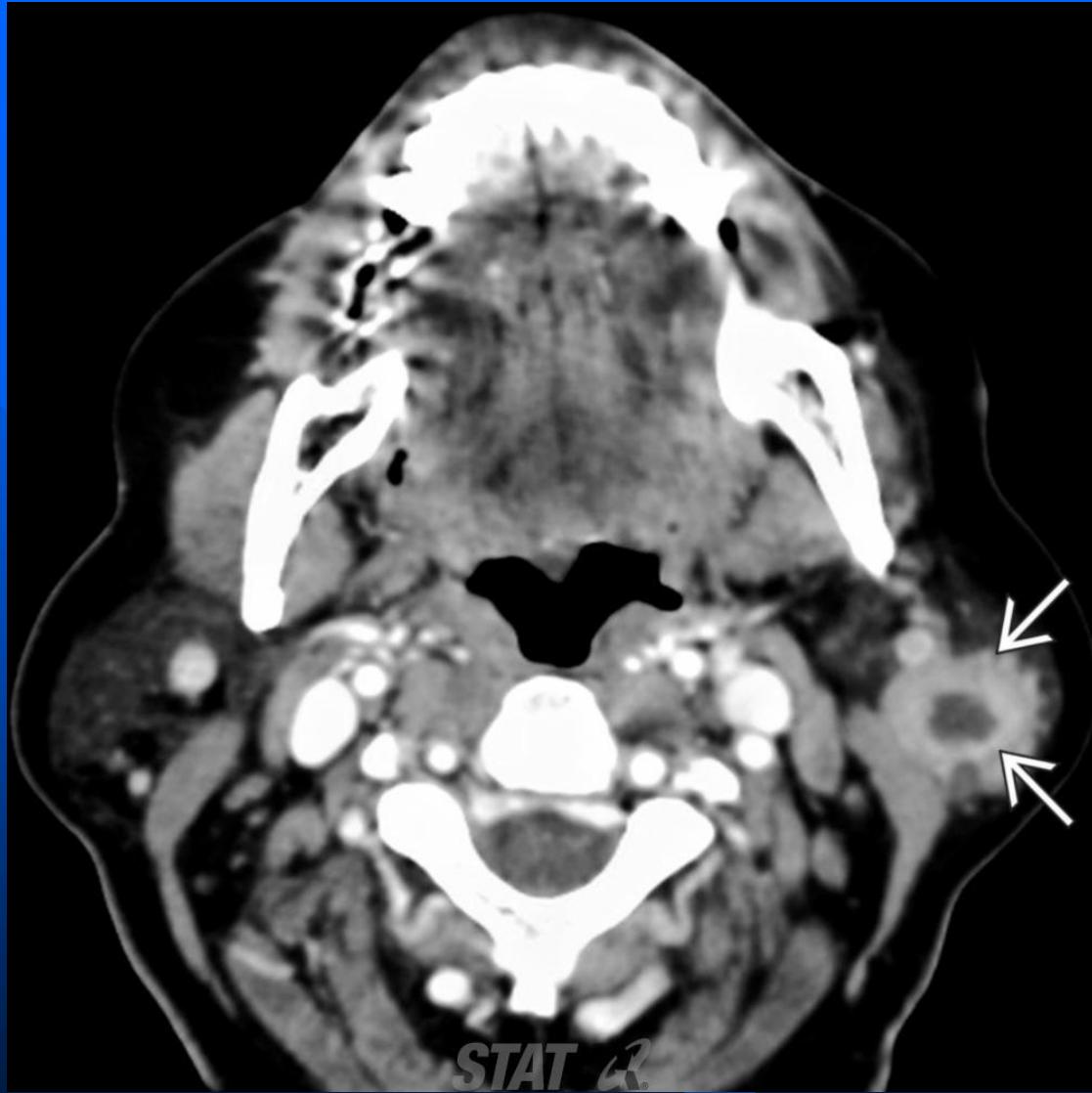


Most common malignant tumor of the parotid gland

Mucoepidermoid carcinoma

- Low-grade MECa may exactly mimic BMT
- In all parotid masses, check for **CNVII perineural spread**
- Superficial lobe >> deep lobe parotid
- Long-term (at least 10 years) imaging follow-up recommended because of late recurrences





Axial CECT reveals a well-defined mass (white solid arrow) in the superficial lobe of the parotid gland. It has a thick rind of peripheral enhancement and is centrally cystic. This is a characteristic imaging appearance for a low-grade mucoepidermoid carcinoma (MECa).



Axial T2WI MR in the same patient shows well-defined, high-signal MECa (white solid arrow) in superficial lobe left parotid. A well-circumscribed, high-signal intraparotid mass is more suggestive of benign mixed tumor.

