

Lacrimal Gland Benign Mixed Tumor

- Benign mixed tumor of lacrimal gland a.k.a. pleomorphic adenoma
- Most common lacrimal gland tumor
 - Up to 90% benign tumors of lacrimal gland
 - Up to 50% of primary epithelial tumors of lacrimal gland
- Cumulative low risk of malignant transformation
 - 5% at 10 years; 10% at 20 years; 20% at 30 years
 - Carcinoma ex pleomorphic adenoma accounts for ~ 10% of lacrimal gland carcinoma
- Occurs in 2nd to 5th decades (younger age than malignant neoplasms)
- Presents with slowly progressive painless proptosis
- Complete surgical excision is curative
 - If capsular disruption, need long-term follow-up

Imaging

- Unilateral circumscribed lacrimal fossa mass with **scalloped bony remodeling**
- Anterior superotemporal extraconal orbit
 - Majority originate in orbital lobe of lacrimal gland
- CT: Mild heterogeneity; occasional punctate calcifications
- MR: Increased conspicuity of cystic elements
- Moderate to marked enhancement on CECT and T1 MR

- **Consider**

- Slow progression and absence of pain help distinguish from malignancy

- **Image Interpretation Pearls**

- Scalloped bony remodeling is characteristic but not pathognomonic



Axial CECT demonstrates a slightly heterogeneous, well-circumscribed, enhancing superolateral orbital mass (white solid arrow). Small internal cysts (white curved arrow) are a common finding. Note opposite normal lacrimal gland (white open arrow).

DDX:

- Lacrimal gland lymphoproliferative lesion
- Lacrimal gland carcinoma
- Orbital dermoid/epidermoid
- Orbital idiopathic inflammatory pseudotumor
- Lacrimal cyst