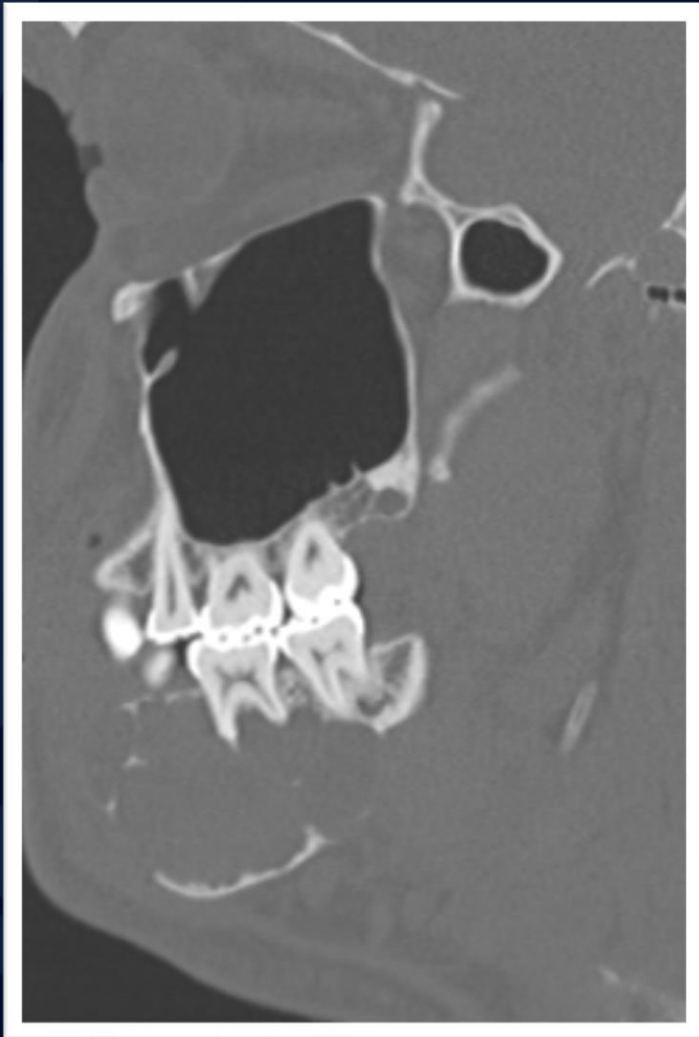


# 32 y/o male with increasing size of mandibular mass

Edward Gillis, DO  
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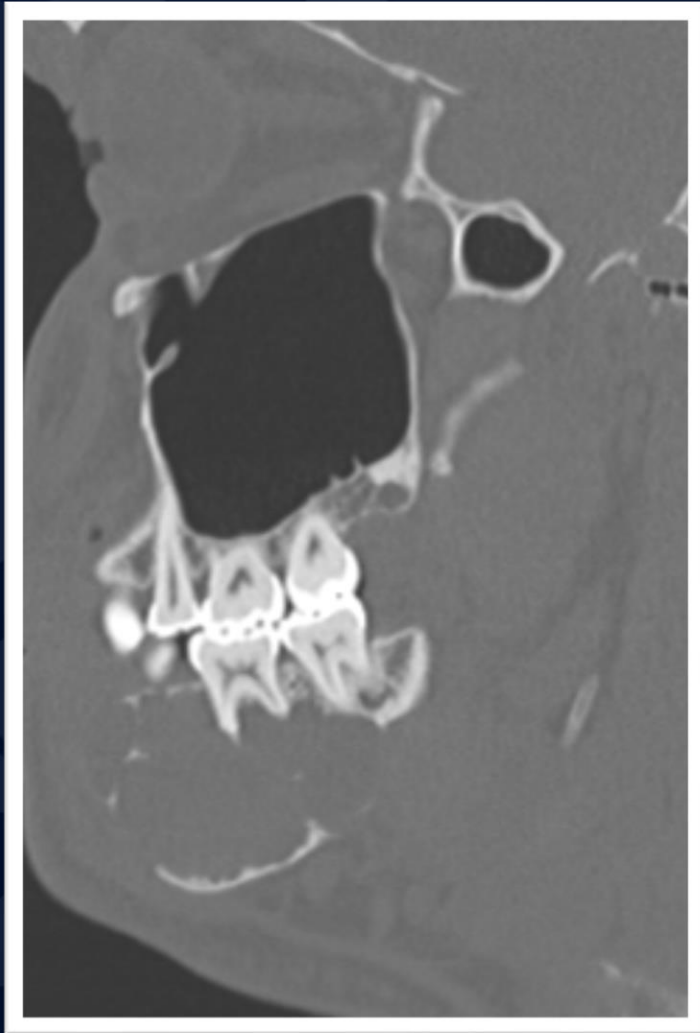
A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. It features detailed vein patterns and a lobed edge.

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A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. The leaf has a prominent central vein and several smaller veins branching off it. The background is a solid dark blue.

# Ameloblastoma

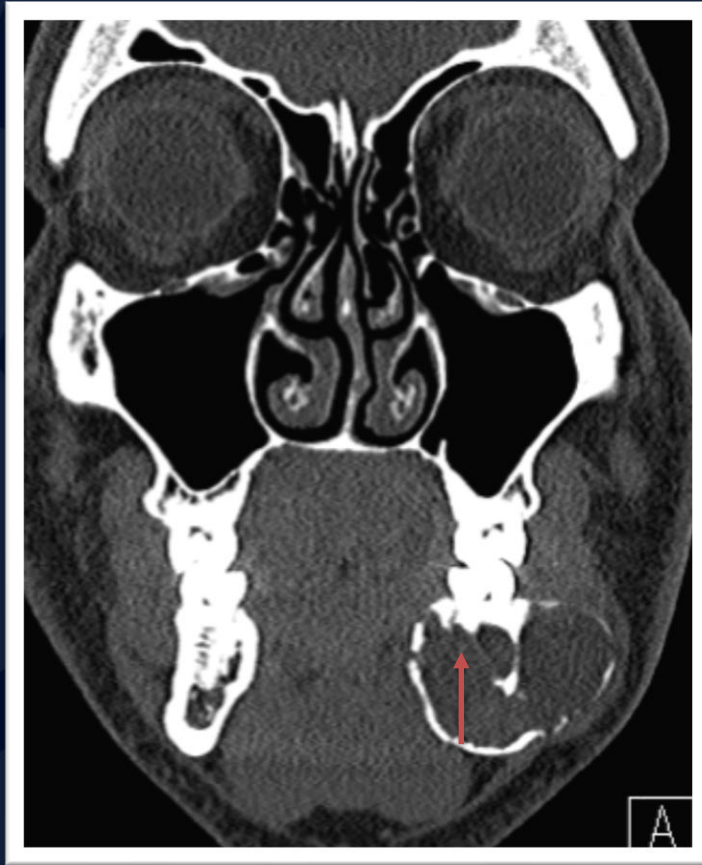
# Ameloblastoma



Sagittal CT image of the mandible shows an expansile, cystic lesion within the body of the left hemimandible associated with marked cortical thinning and disruption.



# Ameloblastoma



Coronal & axial images of the mandible: An expansile, multiloculated, cystic lesion within the body of the left mandible associated with marked medullary expansion & cortical thinning. Focal areas of cortical disruption are also present. Also note characteristic extensive tooth root absorption (arrow).

# Ameloblastoma

## Imaging Features

- Usually multicystic, appears multiloculated with internal septations
  - Thick & curved bony septa form soap-bubble appearance & is a diagnostic clue
  - Irregular, scalloped
- Unicystic with a single cystic cavity.
  - Unilocular, well circumscribed, and well-corticated lucent lesion
  - Often associated with the crown of an unerupted or impacted tooth
  - Lack of solid components or internal septa differentiates it from dentigerous cyst
- Hallmark is extensive tooth root absorption of adjacent teeth
  - Unique to Ameloblastoma (among bubbly lesions)
  - Indicates the aggressive behavior



# Ameloblastoma

## General Features

- Hard, painless facial or intraoral swelling
- Benign but locally aggressive
- Account for 10% of odontogenic tumors
- Usually (80%) located in the mandible
- Generally 3<sup>rd</sup>-4<sup>th</sup> decades, M = F.
- Solid/multicystic in 85% of cases
  - Most aggressive and highest recurrence rate

# Ameloblastoma

## General Features

- Unicystic variant
  - Usually associated with the crown of an unerupted or impacted tooth
  - May resemble a large dentigerous cyst or odontogenic keratocyst
    - Dentigerous cyst: internal solid components, no tooth root destruction
    - Odontogenic Keratocyst: less expansile
- Malignant potential
  - The presence of more aggressive features such as solid enhancing components, papillary projections, and extraosseous invasion suggest malignancy
  - Ameloblastic carcinoma: Histologic criteria of malignancy
  - Malignant ameloblastoma: Histologically identical to ameloblastoma, but metastatic clinically

# References

1. Devenney-Cakir, Brooke, et al. “Cystic and Cystic-Appearing Lesions of the Mandible:Review.” *American Journal of Roentgenology*, vol. 196, no. 6\_supplement, 2011, doi:10.2214/ajr.09.7216.
2. Dunfee, Brian L., et al. “Radiologic and Pathologic Characteristics of Benign and Malignant Lesions of the Mandible.” *RadioGraphics*, vol. 26, no. 6, 2006, pp. 1751–1768., doi:10.1148/rg.266055189.