

Odontogenic Tumors

AMELOBLASTOMA → most common clinically significant odontogenic tumor.

- ① Solid/multicystic (86%)
- ② UNICYSTIC (13%)
- ③ Periosteal or extraosseous (1%)

SOLID OR MULTICYSTIC AMELOBLASTOMA : POSTERIOR MANDIBLE

Radiolucent, well circumscribed U.L. or M.L. (soap bubble/honeycomb)

HISTO: microscopic subtypes - Granular Cell - aggressive Desmoplastic - islands/cords in collagen stroma

- May cause paresthesia if nerve is involved, can erode cortical plates.
- Should resect at least 1 cm of margin past clinical margin for less recurrence. If only curvage = big future recurrence. So should do MARGINAL RESECTION.

UNICYSTIC AMELOBLASTOMA - younger pt's, POSTERIOR MANDIBLE

- Radiolucency around crown of unerupted tooth (looks like dentigerous cyst)

HISTO : ① Luminal - tumor is confined to luminal surface of cyst
② Intraluminal - projects from cystic lining
③ MURAL - infiltrates fibrous cystic wall.

Treatment - cyst enucleation or local resection for mural

PERIPHERAL AMELOBLASTOMA → Extraskeletal - looks like Ameloblastoma but have some features as the others.

Posterior gingival/alveolar mucosa, a few have erosion of superficial alveolar bone

TX - innocuous clinical behavior, rare malignant change, excision w/ low recurrence.

MALIGNANT AMELOBLASTOMA : < 1% Ameloblastomas become malignant.

To look like typical ameloblastoma but metastasizes. Ameloblastic Carcinoma - looks malignant in histology

* know difference b/w Malignant A. and Ameloblastic Ca.

Mets most often in lungs or cervical lymph nodes.

Radiograph: Malignant A. looks just like typical Ameloblastoma, Ameloblastic Ca. Ca has ill defined margins and is more aggressive w/ cortical destruction

AMELOBLASTIC FIBROMA - True neoplasm. 70% post. Mandible. U.L. or M.L. RL. Well defined and tend to be sclerotic. 50% assoc. w/ unerupted tooth (looks like dentigerous)

HISTO: tumor has cell-rich mesenchymal tissue that looks like dental papilla

- often encapsulated, can get quite large + expand cortex.

ADENOMATOID ODONTOGENIC TUMOR - an epithelial tumor that induces odontogenic ectomesenchyme - dentinoid produced.

ANTERIOR Jaw (canine) 65% maxilla. 75% assoc. w/ crown of unerupted tooth

• Pericoronal RL, with opaque material (snowflake calcifications)

• HISTO - Thick fibrous capsule, spindle shaped epithelial cells that form sheets, strands or whorled masses with little connective tissue. Epithelial cells may form rosette-like structures

ODONTOMA - Most common odontogenic tumor. NOT A TRUE NEOPLASM (just a developmental anomaly - hamartoma).

* Compound - multiple small tooth-like structures

* Complex - conglomerate mass of enamel + dentin - no resemblance to a tooth.

• age: 1/2 mean age. location: Compound - anterior Max. Complex - posterior mandible or max.

go from RL w/ smooth contours to R.O. well defined.

- most are small - not bigger than normal tooth size, some can be big + cause jaw expansion.

Myxoma - RL multilocular (soap bubble), indistinct borders. Has loosely arranged cells in abundant/loose myxoid stroma (Tennis racket)

Cementoblastoma - Roots of post. teeth mandibular > maxillary. R.O. lesion attached to + replacing roots, opaque radiating spicules - local expansion, slow growth, usually asymptomatic. TX - Surgically extract tooth w/ mass.

HISTO: Sheets of thick trabeculae of mineralized material, basophilic reversal lines, giant cells, resembles other osteoblastoma.