ODONTOGENIC TUMOURS

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- Odontogenic tumours may be derived from odontogenic epithelium (dental lamina, reduced enamel epithelium, rests of Serres, rests of Malassez) or products of odontogenic mesenchyme (dental follicle, dental papilla, pulp, periodontal ligament) or both in varying proportions.

classification of odontogenic and jaw tumours(W.H.O)

1. ***Benign epithelial tumours***

- • Ameloblastoma
- • Calcifying epithelial odontogenic tumour

2-Benign mixed epithelial and mesenchymal tumours

- • Ameloblastic fibroma
- • Odontome (developing/compound and complex)

3-Benign mesenchymal tumours

- • Odontogenic fibroma
- • Odontogenic myxoma

4-Fibro-osseous lesions

- • Cemento-ossifying fibromas
- • Cemento-osseous dysplasia

5-Malignant neoplasms

- • Ameloblastic carcinoma

AMELOBLASTOMA

- are one of the most commonly encountered benign odontogenic tumors.it is arising from the dental lamina, the enamel organ
- There are several histological variants and three major clinical variants. The major clinical variants include the multicystic or solid variant, the unicystic variant, and the peripheral ameloblastoma.

Solid/multicystic or ‘conventional’ ameloblastoma

- Typically slow growing and can be locally invasive and destructive. The most common location is within the posterior mandible
- Most cases occur in adulthood and are typically asymptomatic
- **Pathology**

There are two histological patterns:

- *Follicular* pattern, the most
- *plexiform* pattern less common

Clinical feature

- Ameloblastomas are more frequent in males, and usually appear after the age of 40 years..
- The initial detection of an ameloblastoma is likely to be a ‘chance finding’,
- when the tumour is evident clinically, there is a slow-growing, painless, expansile swelling of bone.
- . The lesion expands to produce progressive facial deformity and intraorally there may be evidence of malocclusion and mobile teeth. Eventually the bone is perforated and soft tissues involved.

Radiographically

, these lesions are typically multilocular or numerous small cysts a few millimetres across honeycomb' multilocular pattern)

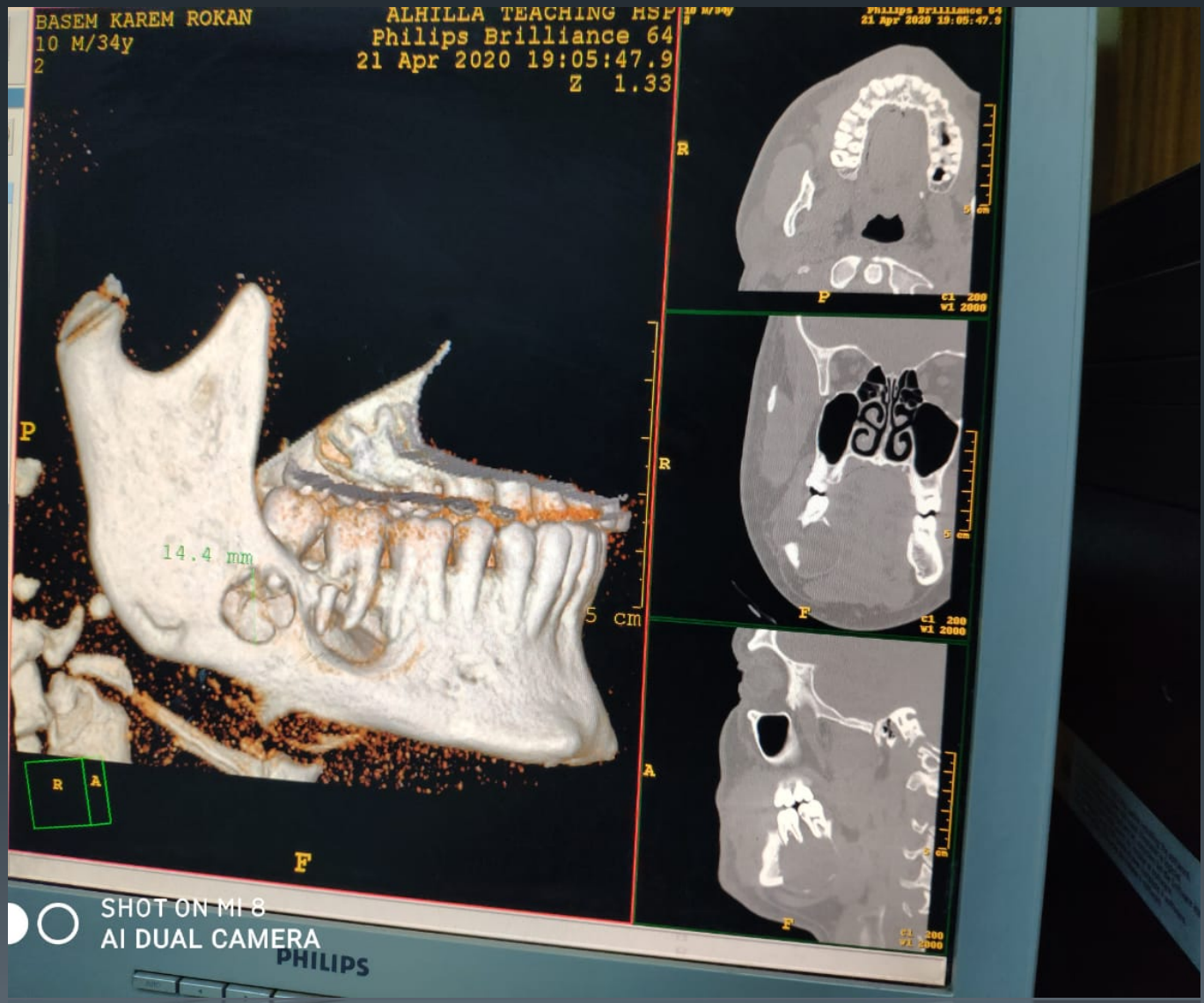
and expansile in nature.. Also there is a root resoption seen .

Treatment

The treatment of choice is surgical excision of the tumour together with removal of a margin of normal bone

& reconstruction by using bone graft through submandibular approch.

Long-term follow-up is required.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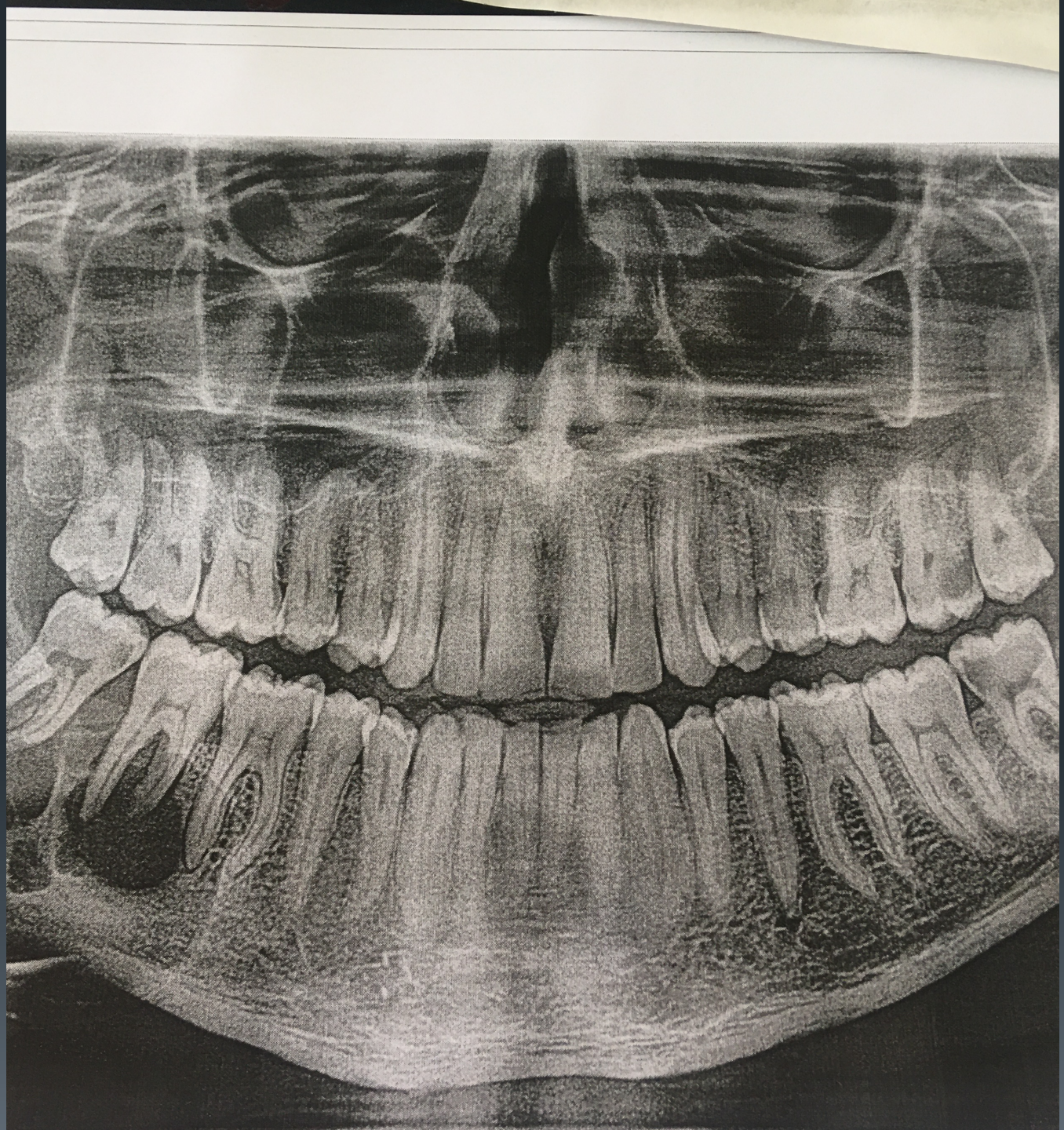
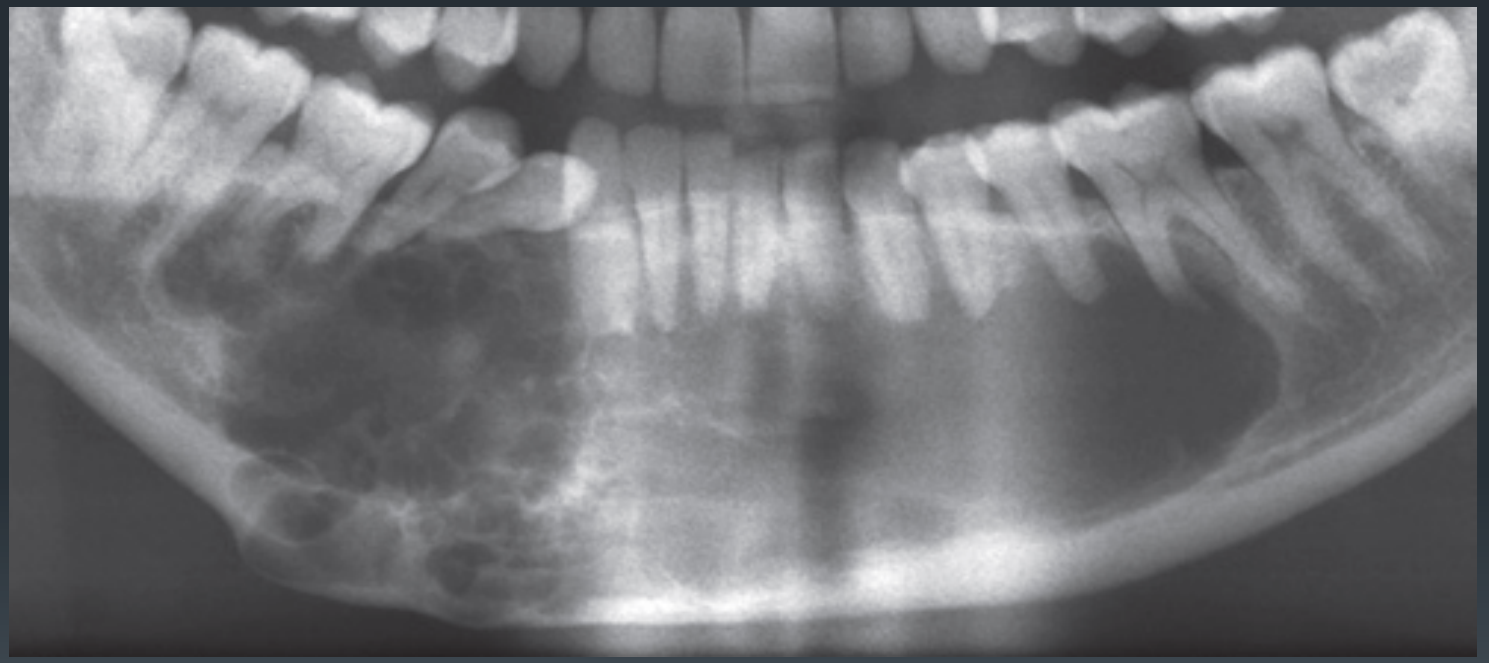
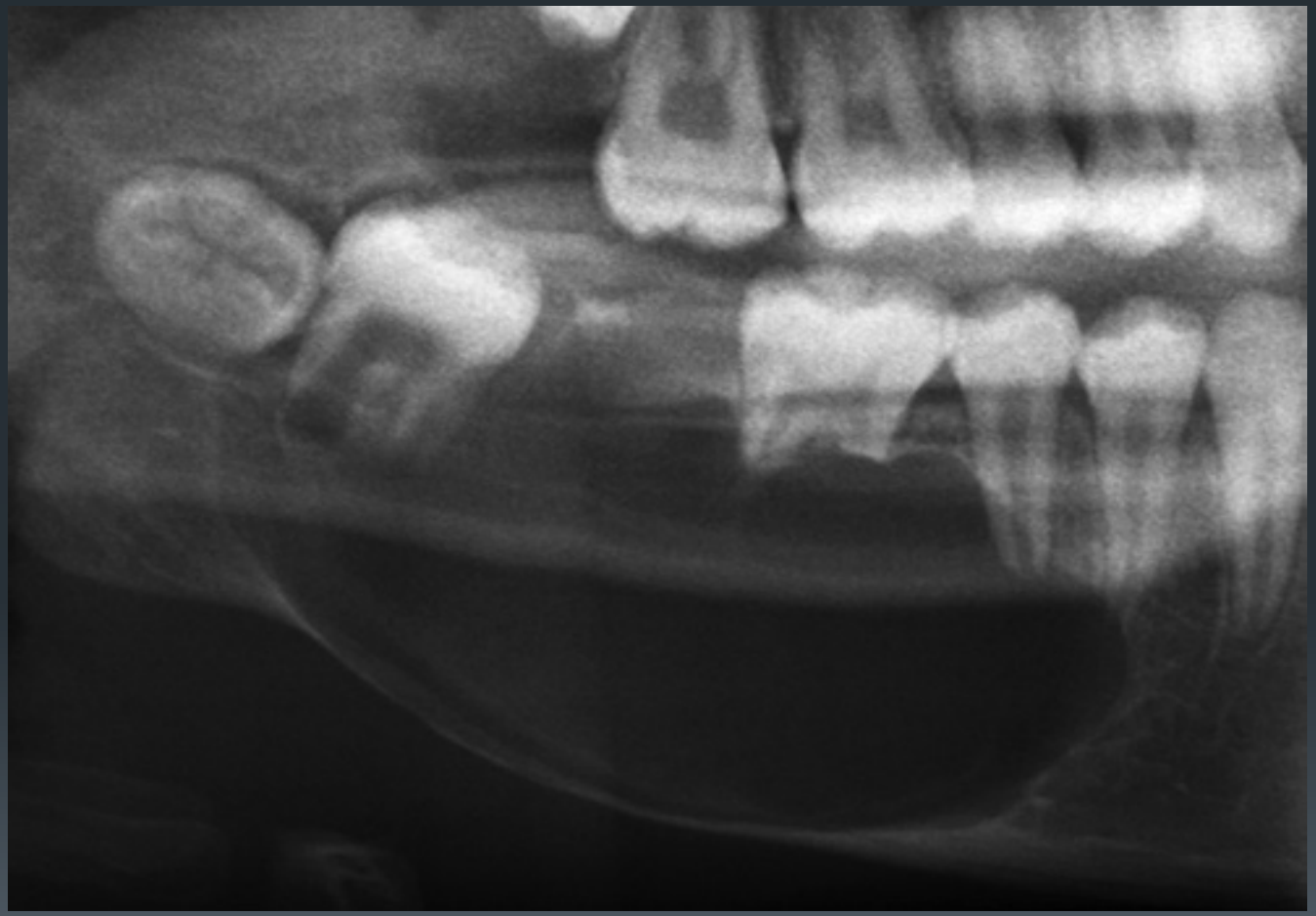




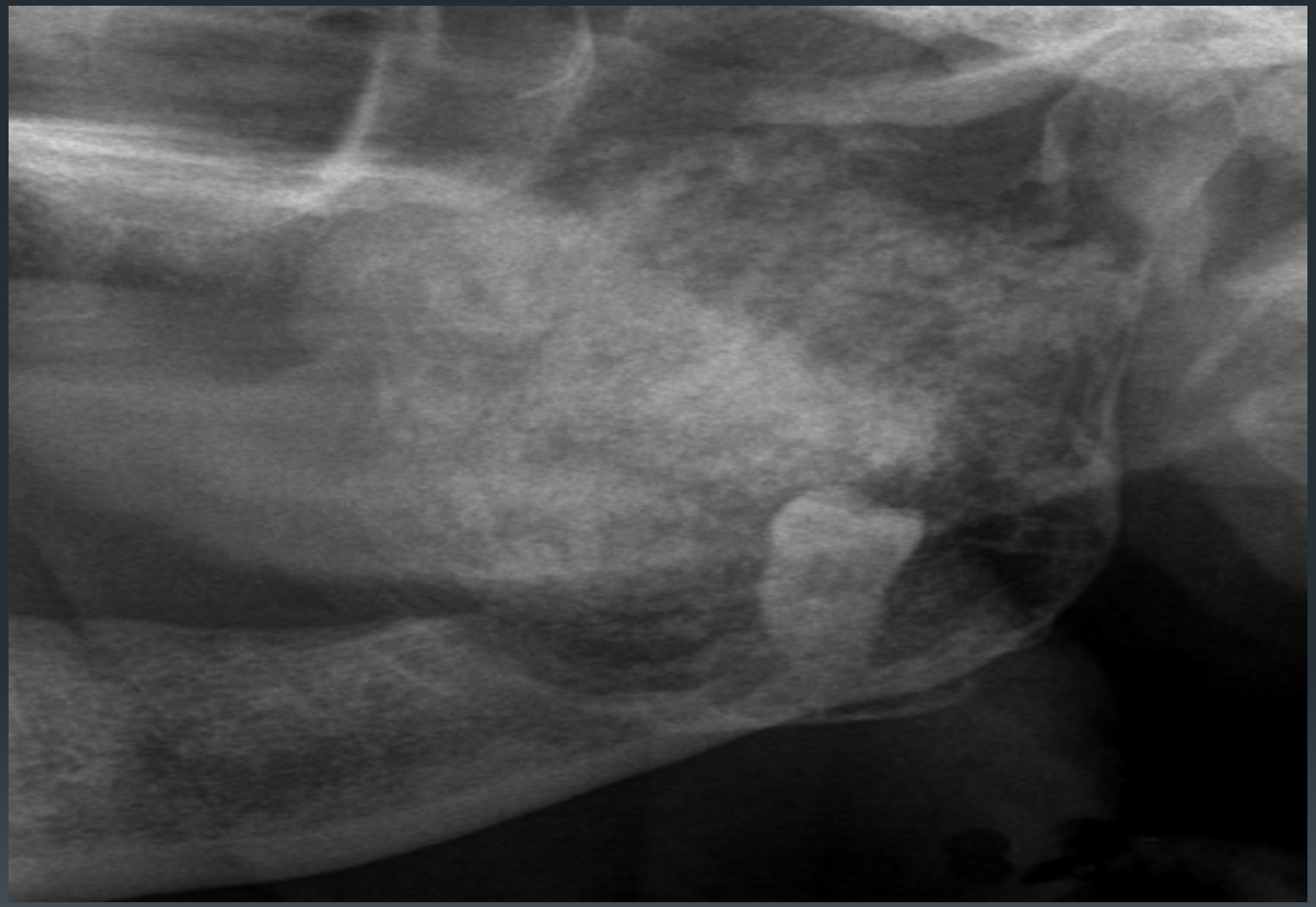
unicystic ameloblastoma

- Less common than the solid variant. Typically, these lesions occur in young adults within the posterior mandible
- Clinically, they may be asymptomatic or demonstrate a painless jaw swelling. Pain and neurosensory disturbance are not typical.
- Radiographically, present as a unilocular radiolucency
- Marginal or segmental resections may be warranted for unicystic ameloblastomas



CALCIFYING EPITHELIAL ODONTOGENIC TUMOUR

- Rare neoplasm of odontogenic epithelium
- • Usually presents between ages 40 and 70 years
- • Most commonly forms in posterior mandible
- • Solid tumour, radiolucent,
- • Histopathologically can resemble carcinoma
- • The only odontogenic tumour to contain amyloid
- • Locally infiltrative like ameloblastoma
- • Treated by excision with a small margin



AMELOBLASTIC FIBROMA

- Rare
- • Neoplasm of both odontogenic epithelium and mesenchyme
- • Usually seen in children or young adults
- • Solid lesion but appears as unilocular or multilocular radiolucency
- • Treated by excision with a small margin
- • Can undergo malignant change

ODONTOGENIC MYXOMA

- Neoplasm of odontogenic myxoid fibrous tissue
- • Usually seen in young adults
- • Benign but prone to recurrence
- • Forms a multilocular, or honeycomb or soap-bubble radiolucency
- • Most common site is posterior mandible
- • Resembles normal dental follicle histologically
- • Treated by excision

Odontomas

Odontomas are hamartomas of tissues of the developing tooth. Two types exist:

compound and complex.

- **Compound odontomas**

(These are clusters of many separate, small, tooth-like structures).

- **Complex odontomas**

(consist of a single irregular mass of hard and soft dental tissues, having no morphological resemblance to a tooth and frequently forming a cauliflowershaped disorganised nodule of enamel and dentin)

Compound odontomas

- These lesions are generally asymptomatic and found on routine radiographic examinations.
- Compound odontomas have a predilection for occurring in the anterior jaws, and complex odontomas in the posterior jaws.
- The lesions are typically found in patients younger than 25 years of age.
- ***Radiographically***, they most often present as radiopacities, ***Histologically,*** enamel, dentin, cementum, and pulpal tissue are seen.
- ***Treatment*** involves enucleation and curettage,