(*Refer to page 281*)

Answer: Odontogenic keratocyst

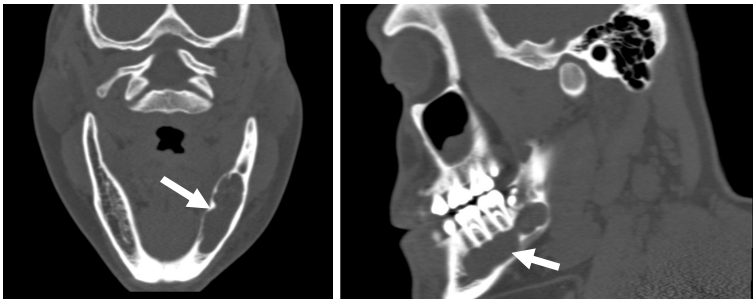
A wide range of cystic lesions occur in the mandible, which may be odontogenic or non-odontogenic in nature. Although, they are usually identified on an orthopantomogram (OPT), differentiation is difficult. Even with supplementary imaging, such as computed tomography, a definitive diagnosis if often not possible, and tissue diagnosis is required.

Odontogenic cystic mandibular lesions are further divided into those with or without mineralisation. Those without mineralisation include; dentigerous cyst, radicular cyst, ameloblastoma and odontogenic keratocyst. Those with mineralisation include odontoma and odontogenic myxoma. Non-odontogenic cystic mandibular lesions include traumatic bone cyst, fibro-osseous lesions, giant cell granuloma, cemento-osseous dysplasia and brown's tumour (of hyperparathyroidism).

Although largely benign, some lesions are aggressive (ameloblastoma and odontogenic keratocyst) and locally destructive requiring surgical intervention. These are indistinguishable on imaging alone. Odontogenic keratocysts arise from the dental lamina or other odontogenic epithelium, representing 5-15% of jaw cysts. [1] Histologically the cyst lining is composed of stratified squamous epithelium, with a corrugated para-keratinised layer, with 'cheesy' material within the cyst lumen. Presentation is most commonly with pain, although swelling or incidental 'pick up' on imaging also occurs. They are typically lucent, unilocular, well corticated lesions with a narrow zone of transition, most commonly located in the body or ramus of the mandible. [2] They are usually associated with an impacted tooth. On CT scan, cortical thinning or cortical destruction and tooth displacement may be apparent, along with the true extent of the cyst (**Panels–** indicated by arrow).

The preferred treatment is surgical enucleation, although recurrent rates are common, reported at up to 50%. [3]

Multiple odontogenic keratocysts occur in conjunction with nevoid basal cell carcinomas and skeletal abnormalities in the rare autosomal dominant basal cell nevus syndrome (Gorlin Goltz syndrome).



REFERENCES

1: Scholl, RJ, Kellett, HM, Neumann, DP, Lurie AG. Cysts and cystic lesions of the mandible: clinical and radio-histological review. Radiographics 1999; 19:1107-24.

2: Weber AL. Imaging of cysts and odontogenic tumours or the jaw. Radiol Clin N Am. 1993; 31:101-20.

3: Oikarinen VJ. Keratocyst recurrences at intervals of more than 10 years; case reports. Br J Oral Maxillofacial Surg. 1990; 28:47-9.