CT Imaging Features of Calcifying Tumors and Tumor-Like Lesions in the Jaw Bones

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Purpose
To display a panel of CT imaging features of benign calcifying odontogenic tumors, and tumor-like lesions in the jaw bones.

Materials & Methods
Odontogenic and nonodontogenic tumors and tumor-like lesions of the jaw bones constitute a wide spectrum of radiographic manifestations. Such a unusually wide range of radiographic manifestations may come from the fact that the jaw bones contain dental components of ectodermal and mesodermal origins, such as enamel, dentin, cementum, and pulp tissues. In particular, calcifying jaw bone diseases are associated frequently with loose or dense calcifications, some of which are very characteristic, although some are not. These calcification patterns have been investigated extensively with plain radiography. However, CT imaging features of the calcifying jaw bone diseases have not been well documented. In the present study, we display a panel of CT imaging features of benign calcifying odontogenic tumors, and tumor-like lesions in the jaw bones, to provide provisional information of diagnostic differentiation based on CT imaging.

Results
Included are ameloblastic fibro-odontoma, adenomatoid odontogenic tumor, calcifying odontogenic cyst, periapical cemento-osseous dysplasia, florid cemento-osseous dysplasia, cemento-ossifying fibroma, odontoma, fibrous dysplasia, osteochondroma, and torus.

Conclusion
Emphasis will be placed on the ability of CT scanning to enable accurate visualization, as well as the recognition of calcifying patterns which will be helpful in guiding the differential diagnosis of jaw bone lesions.