THE 11th ASIAN CONGRESS OF ORAL AND MAXILLO-FACIAL RADIOLOGY

The Pivotal Role of Oral and Maxillofacial Radiology in Dentistry

November 10-12, 2016

The Empress International Convention Center,
Chiang Mai, Thailand
Assessment of unerupted teeth caused by odontoma using CBCT

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Odontomas are the most common odontogenic tumor which derived from differentiated odontogenic epithelial and mesenchyme cells. Generally asymptomatic but frequently interfere with the teeth eruption. In 2005 WHO classified odontomas into two types, compound/composite odontoma (small tooth-like structure) and complex odontoma (a conglomeration of dentin, enamel, and cementum which appears as irregular radiopaque mass in radiograph). CBCT allow evaluation of the tumor in association with unerupted tooth. This paper presented three case reports of odontomas associated with unerupted teeth based on radiographic finding and written based on case report discussion and analysis.

This case report describes three odontomas lesion (compound and complex type) seen around the unerupted teeth and interfere eruption of teeth. Tumor has been found accidentally in CBCT radiographic with asymptomatic behavior. In the first case, CBCT showed multiple radiopaque lesions, irregular. The largest lesion measured 4.7x1.6 mm and the smallest was 2.0x1.8 mm in size. They were associated with an unerupted tooth 23. The second case was a radiopaque lesion with a diameter of 4.5 mm surrounding by radiolucent crypt, and seen associated with an unerupted tooth 21. The third case was a small, inverted teeth-like lesion with 7.7 mm in height, located coronally to an unerupted tooth 43. The data were retrieved from RSGM University Padjajaran's radiology archives.

Conclusion: Odontoma has potential to interfere tooth eruption and often detected accidentally by radiographic finding. CBCT play the significant role in detection and evaluation of the tumor.

Keywords: Odontoma, Unerupted teeth, CBCT