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## **RADIOGRAPHIC FEATURES OF SUPERNUMERARY TEETH**

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**Relevance.** A common disorder of human dentition is the existence of supernumerary teeth. Supernumerary teeth, also called hyperdontia, are included in number abnormalities. The majority of supernumerary teeth are considered to develop as a result of horizontal proliferation or a hyperactivity of the permanent or deciduous dental lamina. Moreover, heredity is believed to be an important aetiological factor in the occurrence of supernumerary teeth. As such, supernumerary teeth do not cause any complication. However, these may lead to delay or failure of eruption of permanent teeth, displacement, crowding, root resorption, dilaceration, loss of vitality of adjacent teeth, subacute pericoronitis, gingival inflammation, periodontal abscesses, dental caries due to plaque retention in inaccessible areas, incomplete space closure during orthodontic treatment, and pathological problems such as dentigerous cyst formation, ameloblastomas, odontomas and fistulae. They may also interfere in alveolar bone grafting and implant placement.

**Aim:** the aim of this study was to examine the radiographic features associated with impacted supernumerary teeth, to determine the relationship between their characteristics and their effects on the important anatomical structures of upper and lower jaws.

**Materials and methods.** 50 CBCT scans were performed on Galileos GAX5 (Sirona Dental Systems, Bensheim, Germany) using standard settings (85 kV; tube current: 5–7 mA; acquisition period: 14 s; effective radiation time: 2–6 s; voxel size:  $0.3 \times 0.3 \times 0.3$  mm). Reformatted sagittal, axial and coronal CBCT images were analyzed using GALILEOS Viewer 1.9 (Sirona, Bensheim, Germany). 30 panoramic tomograms were also evaluated.

**Results and discussion.** 7 supernumerary teeth were found in 80 patients. The supernumeraries were asymptomatic and were detected through routine radiographic examination. Relationship between supernumerary teeth and maxillary sinus or adjacent teeth were clarified.

**Conclusions.** The importance of routine radiographic examination is emphasized for the correct diagnosis of supernumerary teeth, and avoidance of associated complications. Supernumerary teeth can present in any region of oral cavity. These may erupt or remain impacted and may lead to various complications. Clinicians should be aware of their presence and associated problems in order to formulate a sound treatment plan after thorough clinical and radiographic investigations, to meet the challenges.