

عنوان مقاله:

Comparison of mandibular tooth size magnification in digital panoramic view versus panoramic view reconstructed from Cone-Beam CT

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خلاصه مقاله:

Aim: Tooth size in panoramic view has both magnification and distortion. It is supposed that panoramic view generated from Cone Beam computed tomography (CBCT) has more accurate tooth size compared with conventional panoramic view. The purpose of this study was to compare magnification of mandibular tooth size in digital panoramic radiographs andCBCT reconstructed panoramic images. Materials and Methods: Amongpatients referred to Hamadan dental school, having both digital panoramic radiograph and CBCT, YA patients were selected. Maximum width and length of mandibular teeth No. Ψ۶,Ψ۴,ΨΨ,Ψ1,۴1,۴Ψ,۴۴, ۴۶ were measured in digital panoramic views and in CBCT reconstructed panoramic views. The CBCT images in multiple planes were used to give the dimensions referred to as gold standard. MANOVA test, Post Hoc and Tukey were used for statistical analysis.Results: There was a significant difference in width and length of teeth between digital panoramic view and both reconstructed panoramic view and gold standard (P value< •.•Δ). In digital panoramic view the maximum and minimum of magnification was observed in incisors and molar teeth respectively. There were no statistical differences in width and length measurements between reconstructed panoramic view and gold standard except for magnification in incisor teeth width (P value> •.•Δ). Conclusion: CBCT reconstructed panoramic views show significantly less magnification regarding tooth size .compared with digital panoramic views

کلمات کلیدی:

Panoramic Radiography, Cone-beam Computed Tomography, Radiographic magnification

لینک ثابت مقاله در پایگاه سیویلیکا:





