عنوان مقاله:

Comparison of Gonial Angle and Alveolar Bone Height Changes in Panoramic and Lateral Cephalometry Radiographyin Growing Patients

محل انتشار:

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خلاصه مقاله:

Background: This study aimed to compare the gonial angle and alveolar bone height changes betweenpanoramic and lateral cephalometry radiographic images in class II malocclusion patients before and afterorthodontic treatment.Methods: The obtained radiographic images were selected from among ۱۲۰ class ۲ malocclusion cases.The gonial angle and alveolar bone height were measured in the midline and molar regions of panoramicand lateral cephalometric radiographs using the software tools before and after the treatment of patients.Study data were analyzed by SPSS statistical software (version ۲۱.۰), and a significance level was set to۰.۰۵ for all statistical tests.Results: Based on the results, no significant difference was found regarding the gonial angle beforeand after treatment on the right and left sides in panoramic radiography and the gonial angle changesbefore and after treatment in cephalometric radiography (P > ۰.۰۵). However, the obtained results forposterior and anterior alveolar ridge height were significant in panoramic and cephalometric radiographs(P < ۰.۰۵). Moreover, the comparison of the measured gonial angle values before treatment in panoramicand cephalometric radiography represented a significant level (P < ۰.۰۵). Eventually, the statistical resultssuggested that the alveolar bone height differences between panoramic and cephalometry radiographywere significantly different in both anterior and posterior regions after treatment (P < ۰.۰۵).Conclusions: The findings indicated that only measurements obtained from the panoramic radiographywere valid for the gonial angle. However, panoramic and cephalometry radiography procedures cannot bereplaced for assessing the anterior and posterior alveolar bone height.

کلمات کلیدی:

Cephalometric radiography, Panoramic radiography, Gonial angle, Alveolar bone height