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Rheumatoid Arthritis of the Temporomandibular Joint; Comparison of Digital Panoramic Radiographs Taken Using the Joint Limitation Program [JLA View] and CT Scans

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ABSTRACT

Objective: The aim of this study was to evaluate the efficacy of digital panoramic radiographs using the JLA view pro-gram in cases of rheumatoid arthritis and compare them to CT scans of the patients. **Methods:** 40 patients with known condition of RA and clinical symptoms in the TMJ were selected for the study. Radiological evaluation included a panoramic radiograph of the TMJs that was taken and a computer tomography of the joints. In the panoramic radio-graphs taken, isolation of the TMJs was done using the JLA view program, while in the CT scans of the patients, all scans were taken with closed mouth, with a distance of 0.5 mm per slice. The parameters examined were: 1) Bony changes of the condyle; 2) The position of the condyle in the mandibular fossa; 3) The joint space; 4) Bony changes of mandibular fossa. **Results:** There were no statistically significant differences found between the two observers or between the two joints of the same patient [right and left] on the panoramic radiographs. For the case of CT scans there were significant differences between the joint space of right and left joints, while in the ANOVA performed differences were found for the evaluation of the bony changes of the condyle. **Conclusion:** There were no significant differences between the two radiographic methods selected and therefore when a proper simple radiograph is taken and well evaluated, the conclusions drawn from it are well based and there is no need for further examinations

KEYWORDS

Rheumatoid Arthritis; Imaging; Temporomandibular Joint; Panoramic Radiography

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