THE RELIABILITY OF FACIAL LINEAR MEASUREMENTS IN PATIENTS WITH CLEFT LIP AND PALATE BY USING THE OSIRIX SOFTWARE

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INTRODUCTION: The analysis of facial growth changes in patients with cleft, through advanced imaging techniques, allows a more specific way of treatment. OBJECTIVES: To evaluate the reliability and reproducibility of some linear facial measurements, that were obtained using of the OsiriX software in images of cone beam computed tomography (CBCT). METHODS: The sample consisted of CBCT in 10 patients with complete unilateral cleft lip and palate which was performed prior to alveolar bone grafting. Craniometric points and bilateral median sagittal and coronal planes were defined to calculate the distances between transverse and sagittal planes and points, by using the OsiriX software - DICOM Viewer. The researcher defined twice the points and planes according to the record of the measurements, in the different moments. A second evaluator made the same procedure only one time. Data were tabulated and submitted to Wilcoxon statistical test, p < 0.050, in order to verify possible differences between intra-observer and inter-observer. RESULTS: In intra-observer reliability and reproducibility measurements evaluation there was similarities. In the assessment of the results between different observers were similarities as well. CONCLUSION: The use of OsiriX software with CBCT was a reliable and reproducible method for the analysis of sagittal and transverse measurements in individuals with cleft palate.