CONE-BEAM CT AND MAXILLOFACIAL DISTRICT. REAL DIAGNOSTIC POTENTIAL?

ABSTRACT

INTRODUCTION: Cbct technology has become, to present, for the attention of medical users, as a valid diagnostic support in maxillofacial district practice. The technical characteristics achieved over the years by conebeam technology have made it a sophisticated machine that, referring to bone structures, can compare its results with traditional tac technologies while exposing the patient to significantly inferior radiation doses. This, if the "diagnostic product" was really congruent and usable in maxillofacial surgery, would make it a very modern and safe instrument, especially when the "field of investigation" is the pediatric patient. PURPOSE OF WORK: In this regard, we decided to evaluate the true goodness of the "cone-beam product" when referring to the anatomical details of the skull skeleton, with particular reference to the skull base (given its complex and delicate anatomical texture). Especially in view of the dysmorphies of this sector in Craniosynostosis, and therefore in the pediatric patient. MATERIALS AND METHODS: We started from the definition of a cone-beam machine ideal for the analysis of all-round cranial structures including those of the upper jaw (Achilles heel area of modern cone-beam machines). So we analyzed the region of the skull base, comparing conebeam cuts to the most authoritative anatomical preparations (anatomical texts and preparations).Comforted by these results, we carried out a bibliographic revue to evaluate the consistency of our work hypothesis.

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