PERBEDAAN PREDIKSI MATURASI TULANG ANTARA METODE CERVICAL VERTEBRAE MATURATION DAN SKELETAL MATURATION INDEX UNTUK MENENTUKAN USIA OPTIMAL PERAWATAN DENTOFASIAL

PREDICTION BONE MATURATION BETWEEN CERVICAL VERTEBRAE MATURATION AND SKELETAL MATURATION INDEX FOR THE ASSESSMENT OF TREATMENT PLANNING IN DENTOFACIAL GROWTH AND DEVELOPMENT

ABSTRACT

Background: Bone maturation is an assesment of dentofacial growth and development. A method of skeletal maturation index are used to analysis bone maturation. This method insufficiency need more money and radiation. New method as cervical vertebra maturation at cephalometri view. This method have advantage, inexpensive and minimal radiation because lateral cephalometri is a routine in orthodontic treatment. Aims: The aim of the study literature was to find a correlation between the evaluation of skeletal maturation performed by the study of cervical vertebrae maturation indicators and the evaluation obtained by the hand and wrist maturation indicators. **Methods:** This research was done by cefalometri and hand-wrist radiograph between ages 10-18 years. The cervical vertebral analysis was assessed by Bacetti analysis have 5 stage CS1 until CS5. The skeletal maturation index was evaluated by the Bjork index, whereas nine stages were reduced to five growth stage intervals. Conclusion: Both analysis cervical vertebrae maturation and skeletal maturation index can be used to evaluate skeletal maturity, cervical vertebrae maturation more easy and avoiding the need for an additional radiograph.

Keywords: Cervical vertebrae maturation, skeletal maturation index, dentofacial growth and development.