ABSTRACT

METODE DEMIRJIAN DALAM MEMPERKIRAKAN USIA ANAK POPULASI TIONGHOA DI SURABAYA

(AGE ASSESSMENT OF CHINESE POPULATION CHILDREN IN SURABAYA USING DEMIRJIAN’S METHOD)

Background: The age of the individual can be assessed from dental age which is one of the important factor taken into account when formulating treatment plans and having particular relevance to the timing of treatment. A method for assessing dental maturity in different populations was first developed in 1973 by Demirjian et al., which is based upon an assessment of crown and root formation stages from dental radiographs. This method has not been applied to Surabaya Chinese population children. Purpose: The aim of this study is to evaluate the applicability of Demirjian’s method for age estimation in Chinese population children in Surabaya, 9-15 of age. Method: Panoramic radiographs of 30 (15 males and 15 females) Chinese population children in Surabaya, 9-15 years of age were examined using Demirjian’s method. Panoramic radiographs were scored by one examiner. Chronological age was obtained from the date of birth of children. Correlation between the dental age and chronological age was analysed using the paired t-test. Result: When Demirjian’s method was applied to Chinese population children in Surabaya, mean difference between dental and chronological age for males shows overestimation of 0.34 years and for females shows underestimation of 0.51 years. Conclusion: the Demirjian’s method can be applied to Chinese population children in Surabaya for age assessment.

Keywords: age assessment, dental age, chronological age, Demirjian’s method