Using dental age by estimation of chronological age in Czech children aged 3-18 years

Hana Eliasova¹, Kristina Ginzelova² and Tatjana Dostalova²

¹Institute of Criminalistics Prague, Czech Republic
²Charles University, Czech Republic

With the global migration of whole families, it is nowadays important to determine the actual Chronological Age (CA) of children and young people. Dental Age (DA) is preferred for the estimation of CA in children. Knowledge of dental age also significantly helps in endocrinologic diagnoses in children and in the design of orthodontic treatments. The assessment of DA is significant within the scope of the identification process of unknown dead bodies. Dental age estimation is based on the establishment of tooth development stages. The Demirjian methods to the assessment of the dental age are based on analysis of the orthopantomograms. 505 Czech healthy boys and girls aged 3-18.99 were radiographically examined at the Charles University, Prague. The factors of underlying diseases influence on the accuracy of the dental age estimation were mentioned. Descriptive statistics were used for statistical evaluation to compare deviations of the mean values chronological and dental age in each age group. Based on our results, methods Demirjian - original 7 teeth 1973 and Demirjian - revised 7 teeth 1976, appear to be the best methods for calculating the DA of healthy Czech children of both genders. The mean of paired t-tests for difference between DA and CA showed no statistically significant SD in either gender.

Biography

Hana Eliasova completed her PhD at Charles University. She is an authorized expert in Forensic Anthropology and the Head of the Department of Anthropology, Biology and Physio-detection in the Institute of Criminalistics Prague (Czech Republic). Her research work is focused on human remains examination and identification according to bones and teeth. She is a member of the National Disaster Victim Identification Team. She is an external educator at the Charles University in Prague and at the Masaryk University in Brno (forensic anthropology, trichology). She has published papers in reputed journals and also is a Member of an Editorial Board.

hanaeliasova@atlas.cz

Notes: