Abstract

In the juvenile period, a person reaches important legal boundaries, namely 15 years, criminal liability, and 18 years, adulthood. For this reason, it is essential to use the most accurate and reliable methods of estimating age, as legislation requires strict results. Although the methodology of age estimation is based on the strongest possible correlation of given developmental features with chronological age, their variability is not negligible. The aim of the bachelor's thesis was to focus on dental and osteological methods for estimating age in the juvenile period and to determine their accuracy and reliability to differentiate the legal boundaries.

Age estimation according to dentition proved to be more accurate and reliable in comparison with age estimation according to skeletal maturation. Methods using teeth other than the third molar should be used to distinguish the 15-year limit. Among the most accurate is, for example, the method of Demirjian et al. (1973). Third molar methods are key to distinguishing the 18-year limit, and the most accurate of these include, for example, the method of Cameriere et al. (2008). Of the osteological methods, methods using ossification of the bones of the hand and clavicle are important. Most other osteological indicators are burdened by great variability of development and methods based on them can only be used as complementary. The most accurate and reliable methods for distinguishing these limits must work with deviations from the chronological age in a maximum of weeks or several months.

Key words: age estimation, juvenile period, dental age, skeletal age, third molar, variability