Abstract

The objective of this study was the assessment of linear enamel hypoplasia (LEH) in early medieval Great Moravian population sample – Rajhrad. Linear enamel hypoplasia represents the disruption of enamel matrix secretion during the growth of the tooth crown, which is related to a generalized growth disturbance. This is why it is considered as a nonspecific stress marker. The incidence of LEH could reflect stress factors during the life of early medieval population.

The aim of this study was to asses the frequency and timing of the LEH. The incidence of LEH was supposed to be high because of poorer nature of this cemetery. The results of our study could confirm or falsify this assumption and determine relation between LEH and socio-economic status.

The timing of LEH was estimated from regression equations consisting of distance from LEH to CEJ (cemento-enamel junction) and crown height of upper and lower canines.

108 individuals from approximately 4 – 15 years were observed. The frequency was high according to the assumption – 88 %. That confirms poorer life conditions. The range of mean age of LEH formation was from 2,94 – 4,72 years in individuals with multiple LEH incidence. The mean age of single LEH formation was approximately 3,98 years.

The earliest onset of LEH in the pooled sample occurred most commonly at around 3,76 years.

Key words: linear enamel hypoplasia, Early Middle Age, Great Moravia, timing of linear enamel hypoplasia