Abstract

The human face is characterized by a combination of morphological characters, which are unique for each individual. These characters are subject to change during ontogeny influenced by age, pathological conditions, injuries. The aim of this diploma thesis was an observation of age changes in the face of individuals in the age range from one to eighteen. Resource material were black and white photographs of girls and boys. Analysis of age changes in facial area was performed using methods of geometric morphometrics, specifically thin plate spine (TPS). The shape analysis confirmed, that between age and face shape exists significant relationship. It was found, that is mainly due to significant changes in height and width ratios. Face extends and narrows, forehead height is reduced and lower jaw grows to lenght. Facial changes are also influenced by the sex of individuals, while for girls the overall growth in the face stopps about age of fifteen, for boys continues to the age of eighteen years.

Keywords

Geometric morphometrics, thin plate spline, ontogenetic development of the face, age changes.