

Abstract

Idiopathic scoliosis (IS) is one of the most common structural spinal deformities. Patients with idiopathic scoliosis have altered posture due to scoliosis. The aim of the study was to evaluate the position of the head in children with IS and to compare the results with a control group of healthy children. The position of the head was evaluated by the method of kinematic analysis from digital photographs, where we compared the coronal head tilt and the coronal shoulder angle between the two groups. Furthermore, the measurement of the subjective visual vertical was performed using Bucek's method. Both of these measurements were performed in 10 children with IS (age $12,2 \pm 2,4$, mean \pm SD; Cobb angle $14,9^\circ \pm 8,8^\circ$ SD) and the group of 10 healthy children (age $13,9 \pm 2,5$). Based on these measurements, we evaluated three hypotheses. We came to the conclusion that both groups have comparable average deviations from the central position of the head and shoulders, but in the group with IS there was higher variance of values. In the group with IS, in seven patients the sides of the SVV tilt and the head tilt do not match.