

Summary

The objective of the work was to describe therapy by the method of Katharina Schroth and carrying out an experiment where current changes of the spine shape were evaluated in symmetric and asymmetric isometric activation of upper limbs (element based on the Schroth method) in people with idiopathic scoliosis.

The presented work was carried out in a group of 5 adolescents (girls with idiopathic scoliosis). For evaluation, the shadow moiré topography was used. The probands were monitored and evaluated in 5 positions: resting posture with both upper limbs lowered, resting posture with abduction and exterior shoulder rotation and 90 degrees elbow flexion, standing posture with symmetric contraction of upper limbs (leaning against both poles) and standing posture with asymmetric contraction of the right upper limb, left upper limb (leaning against one pole). Changes of lumbar flexure were compared in all the three basic anatomic levels.

Based on the results we can state that due to muscle contraction, the shape of the spinal column changes (often significantly) in all three anatomic levels. The numerical findings can be used in physiotherapeutic practice in choosing the right therapy for a scoliotic patient. Therefore, this therapeutic element of the Schroth method is still a good option for the scoliotic therapy.

Key words: idiopathic scoliosis, kinesiotherapy, Schroth method in scoliotic therapy, exercise in the vertical line using poles, shadow moiré topography