

Oral presentation

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Posture in youths practising oriented training activity

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Background

Postural faults in youths is an increasing social and medical problem. The incidence of postural faults in children and youths is appallingly high. Rapid, continuous environmental and habitual changes engrave adverse imprints in human health, including foundations for proper motor activity and general condition of a body – good posture.

Aim of the study

The aim of the study was to determine and compare posture in youths attending to sport-oriented and general-oriented schools.

Patient population

Study included 90 youths (36 M and 54 F) aged 11–14 years (mean = 11.9, SD = 0.52).

Sixty youths attended to sport-oriented schools (athletics and swimming); remaining 30 subjects attended to general-oriented schools.

Methods

Posture examination included visual and palpable evaluation according to modified Klapp protocol. Thoracic kyphosis and lumbar lordosis were measured by Rippstein plurimeter. In case of scoliosis, clinical rotation was measured by Bunnel scoliometer.

Results

Thoracic hyperkyphosis was observed in 72% of all cases (77% of non-sport-oriented vs. 70% of sport-oriented). Decreased values of thoracic kyphosis were not observed in swimmers. Lumbar hyperlordosis was observed in 43%

of all cases, with prevalence of non-sport-oriented youths (67%) vs. 37% of athletes and 27% of swimmers.

In coronal plane, 85% of all subjects presented at least one postural fault. The symmetry in swimmers was significantly better than in general-oriented group ($p < 0.05$).

Conclusion

1. Postural faults are common both among youths attending to sport-oriented and general-oriented schools.

2. Swimmers present kyphotic model of posture, but nearly perfect silhouettes in coronal plane.

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