CORRELATION OF SPIROMETRIC PARAMETERS TAKEN AT A SINGLE EXAMINATION WITH THE QUALITY OF LIFE IN CHILDREN WITH STABLE ASTHMA

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Aim: The aim of the study was to assess the correlation between the rate of asthma severity, spirometry, PEF variability, and the quality of life according to Pediatric Asthma Quality of Life Questionnaire (PAQLQ).
Material and methods: A group of 54 children (25 F, 29 M) aged 7-17 yr (10 with severe, 22 with moderate, and 22 with mild asthma) participated in the study. The course of the disease was stable among all children for at least 6 weeks prior to the tests. All patients underwent spirometry and PAQLQ according to Juniper's three times at 2 weeks' intervals (Visits 1, 2, and 3). In the period between examinations children measured PEF at home and a PEF variability index was calculated.
Results: PAQLQ-score during all visits did not differ significantly between severe, mild, and moderate asthma children. The quality of life in girls was significantly lower than in boys at the same spirometric parameters during Visit 1 (5.4 *vs.* 5.8; $P<0.03$) and Visit 3 (6.0 *vs.* 6.4; $P<0.02$). PAQLQ did not correlate with spirometric parameters obtained during Visits 1, 2 or 3. A positive correlation between PAQLQ and the variability of PEF in the period preceding Visit 2 and Visit 3 was shown ($r=0.35$, $P=0.02$). The change in PAQLQ between Visit 1, 2, and 3 did not correlate with the changes in spirometric parameters.
Conclusions: PAQLQ should become an additional tool for a full health assessment in children suffering from bronchial asthma. A change in PAQLQ may indicate a need for broadening the diagnosis and modifying treatment.