VISUAL ABILITY IN AMBLYOPIC CHILDREN COMPARED TO CHILDREN WITH NORMAL VISUAL ACUITY

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Vision rehabilitation in adults with low vision, even in children, is achieved with special devices, called low vision aids, LVA.

The aim of the study is to determine the degree of visual function in amblyopic children and daily activities that are best related to those of normally sighted peers with normal visual acuity.

The subjects were divided into two groups, matched 1:1 by age and gender: the first group consisted of 19 amblyopic children, and the second one consisted of 19 children with normal visual acuity. The questionnaire used to assess visual ability was Cardiff Visual Ability Questionnaire for Children (CVAQC), a reliable instrument for measuring visual ability in children with low vision. The study was conducted in the only rehabilitation center for amblyopic children in this region, so this is also a pioneer study.

The overall result of CVAQC in amblyopic children was 1.287 log vs.-2.956, representing statistically significantly poorer visual ability in comparison to peers without vision deficit (p<0.005). Amblyopic children function best in entertainment activities, especially in listening music (-2.31 log); as for sport, these children report swimming to be their favourite activity (-0.99 log). In the field of education they show best results in language acquisition (-0.79 log) and the worst in mathematics (3.13 log). The greatest problem is reading small print texts books (2.61 log).

Low vision children have poorer result of visual function in comparison to their peers with normal visual acuity. A precise deficit assessment in the most important spheres of life can be determined by using the questionnaires, so the rehabilitation can be rightly chosen. Acta Medica Medianae 2016;55(1): 33-37.

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