

Physical activity in children following cardiovascular interventions

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Introduction: Physical activity taken up at a very early age has a positive influence on both motor and psychosocial development. In a group of children after cardiovascular surgery a certain controlled level of physical activity is not only possible, but necessary. There is limited bibliography available with information about the development, health, lifestyle, body efficiency, and the level of physical activity among those people several years after the surgery.

The aim: To evaluate the level of physical activity among children after cardiovascular surgery.

Materials and methods: 98 children at a school age after cardiovascular surgery, and 98 parents/legal guardians of these children took part in the survey. Mean age for children with HLHS was 10 ± 3 and for other CHD 12 ± 4 . There were 17 children with HLHS after BDG or Fontan operation, 17 children after TGA or DORV/TGA arterial switch procedure, 7 after tetralogy of Fallot correction and 57 after different other operations. The questionnaire for parents consisted of 29 questions, 11 general and 18 about physical activity. The questionnaire for children had 9 questions concerning physical activity.

Results: Over 50% of the children surveyed participate in PE lessons, but as many as 79% of them get tired faster than their peers. Only 13% of the parents/legal guardians claim that their children's participation in everyday activities is lower than the one represented by their peers. Most of the parents/legal guardians think that physical activity is beneficial as far as proper development is concerned, and let their children undertake it. The children from the group interviewed often take up different forms of physical activity. Most of them leave their homes during holidays, but only 26% of them have ever been to a camp. The statistical analysis did not show any differences between children after Fontan operation in comparison to other group of CHD concerning the necessity for physical activity.

Conclusions. Parents and children saw the necessity for physical activity in everyday life. Organized forms of physical activity for children after CHD operations are needed, especially during holidays.