Abstract

Obesity negatively affects quality of life of children and its high prevalence is a global problem. Obesity is a multifactorial disease, whose formation influence genetic and exogenous factors. Exogenous factors can act directly on obese individuals and can be defined by the markers of personal history, or may act within the family and then they are define by the markers of family history. The health risks associated with obesity are high and therefore you need to focus on the treatment of obesity in childhood. In childhood it is still possible to change unhealthy habits and lifestyle.

The aim of this work is to describe the relationship of severity of obesity of obese children in the selected data from their personal and family history and analyze the success of reducing treatment of children in dependence selected aspects of their personal and family history.

Monitored set includes 398 girls and 216 boys aged 6 to 18 years who were examined anthropometric at the beginning and in the end of the stay in the hospital, Dr. Philip in Poděbrady, and whose parents responded to the survey questions for parents of obese children. Data where colected between years 2000 and 2010. The following parameters were monitored: body weight, body height, BMI, skinfolds thickness, circumferential and width parameters and body composition.

The work was evaluated the severity of obesity in the begining of reduction therapy and analyzed the relationship between obesity and severity of personal and family history. We tested the significance of the differences between measurements at the begining and measurements in the end of treatment reduction and thus determine the order of the parameters that are appropriate to monitoring treatment success. The most important part of this thesis is to compare the differences in the differential values of the monitored parameters depending on personal and family history of boys and girls.

The study results show that the values of body weight, BMI, circumferential parameters, thickness of skin folds, and the proportion of fat components of the total body composition in obese children are far above the average Czech reference population in the begining of reducing therapy. Influence of family history data on the severity of obesity is more significant than the influence of personal history data. The family history data has a significant influence on the severity of obesity for both boys and girls, particularly the

severity of maternal obesity. Also severity of paternal obesity influence girls. From the data of personal history significant influence on the severity of obesity in boys have birth parameters, in girls particularly place of eating.

Based on the significance of differences we chose the following parameters for analyze the success of reducing treatment: body weight, BMI, chest circumference over mezosternale, abdominal circumference, gluteal circumference, gluteal thigh circumference, maximum circumference of calf, abdominal, tricipital, subscapular and suprailiacal skin fold, proportion of muscle and fat components of the total body composition in percentage and in kilograms by Matiegka and percentage of fat components in the total body composition by Pařízková.

The successful treatment of obesity affect eating habits, duration of breastfeeding and birth length for both boys and girls. Boys also showed the influence of time spent watching television and sports activities of the mother. girls showed an affect parental education levels, limited sports activities for mothers and their own limited sporting activities.