Impact Of Physiotherapy And Diet Program Onobesity İn Children With İntellectual Disabilities

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Introduction: Childhood obesity is an important health problemin children with intellectual disability as well as in healthychildren. The aim of this study was to investigate the long-term effect of physiotherapy and diet programs on obesity inchildren with intellectual disability during school and puberty.

Patients and method: A total of 133 children with intellectualdisability (39 females, 94 males; mean age 15.23□3.25y) wereincluded in the study at Denizli Cßamlık Special Education andVocational Training Center School as primary and secondaryschool students. Waist-hip circumferences and height-weightwere measured, body mass indexes (BMIs) were defined. Eachchild was given a diet program by a specialist dietitian and aphysiotherapy program consisting of aerobic exercises andstrengthening exercises was given by physiotherapists 3 days aweek, for 20 minutes a day. After 1 year, cases were reevalu-ated.

Results:Mean BMIs of cases were 22.79□6.64 kg/cm2at firstevaluation and 22.67□6.75 kg/cm2at second evaluation. Thischange was not significant ($p>0.05$). Waist circumference aver-aged 79.08□17.06cm at first evaluation and 79.20□17.66cm atsecond evaluation and this change was not significant ($p>0.05$);average hip circumference was 91.36□15.51cm at first evaluation and 88.08□15.62cm at second evaluation and this changewas significant ($p<0.05$).

Conclusion: One-year diet and physiotherapy program did notcreate any change in waist circumference and BMI, whilethere were significant changes in hip circumference of thesechildren. It is thought that the reason for inability to achievedesired results is due to difficulty of implementing diet andphysiotherapy programs at home, underlying cognitive prob-lems, protectionism of families on nutrition, and occasionalimmobilization of children due to cognitive problems.