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Curriculum vitae:

Special education teacher and therapist, equine assisted therapist, honorary associate professor at MATE University, Vice President of the Hungarian Riding for the Disabled Federation, Hungary. She has been working as a special education teacher and therapist since 1995, and since 1996, she has specialised in remedial riding and vaulting. She is one of the founding members of the Hungarian Riding for the Disabled Federation. She is a professional leader of the training courses organised by the Hungarian Riding for Disabled Federation. Since 2005, she has been working as the Head of the Therapeutic Riding and Education Centre of the International Children's Safety Service in Fót. She is also a lecturer at several Hungarian universities.

Category: oral presentation

Topic: Disabilities & Symptoms: Sensory Processing Differences

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Title: COMPARATIVE GAIT ANALYSIS BETWEEN CHILDREN WITH SENSORY PROCESSING PROBLEMS AND AGE-MATCHED CONTROL GROUP: ANALYSIS OF THE EFFECTIVENESS OF EQUINE-ASSISTED THERAPY

Keyword 1: sensory processing problem

Keyword 2: gait

Keyword 3: GAITRite®

Abstract:

Objective: The aim of the GAITRite® pressure-sensing mat study was to determine the effect of equine-assisted therapy on the gait patterns of children with sensory processing problems.

Methods/ design: Twenty-five children (pretherapy: 5.44 ± 0.98 years, 115.64 ± 11.18 cm, 22.57 ± 5.16 kg, posttherapy: 5.64 ± 0.93 years, 117.00 ± 11.06 cm, 22.90 ± 5.61 kg) with sensory processing problems (7 of them also with a diagnosis of autism) and eighteen age-matched controls (4.94 ± 1.13 years, 109.33 ± 13.34 cm, 20.54 ± 7.09 kg) participated in the study. The gait of children with SPD was monitored before and after the seven-month-long equine-assisted therapy period, the control group performed the measurement once. A GAITRite® pressure-sensing mat was used to detect the pressure data of each step of the children and calculate the twelve chosen spatial and temporal gait parameters.

The results of the children (with SPD) before and after the therapy period were statistically compared to the control group results, and the Lilliefors normality test was carried out. In the case of normal distribution, the unpaired t test, otherwise, the Mann–Whitney test was executed.

Results: The pretherapy results show thirteen significantly different results in comparison to their healthy peers, whilst only three results were significantly different in the case of the posttherapy results.

Conclusions: The results in comparison with the control group show that EAT helped to improve the walking parameters of children with SPD.