# **HIPPOTHERAPY ASSOCIATED WITH TACTILE STIMULUS AS INTERVENTION IN CHILDREN WITH CONGENITAL BLINDNESS AND OCULAR PRESSURE STEREOTYPE**



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# INTRODUCTION

People with visual impairment and blindness may develop a series of unusual non-functional movements called stereotyping which is a repeated pattern of movements that are not considere normal, which is a motor disorder that involves repetitive and nonfunctional motor behavior such as, rocking, shaking, etc. The motion caused by horses promotes stimuli that increase sensorial input for various systems of the body, such as the vestibular, the proprioceptive and tactile systems.

#### PURPOSE



The objective of this study was to investigate the hippotherapy intervention effect associated with tactile stimulation on a child with congenital blindness and intellectual disabilities whose stereotypic movement disorder involves pressing on his eyeball.

## **METHODS**

As for the method, a single-subject ABAB design was used, 34 sessions of hippotherapy associated with tactile stimulation were conducted once a week,

lasting 30 minutes each.



The results show that hippotherapy associated with tactile stimulation was effective in reducing the stereotypical behavior of pressing the eyeball during the sessions of hippotherapy.



Figure 2: Frequency behavior of pressing the eyeball in the base lines one and two (BL1 and BL2) and intervention plans process (I).

### CONCLUSION







Analyzing the results, it is possible to conclude. that tactile stimulation associated with hippotherapy for a child with congenital blindness, intellectual disabilities, and behavior issues (eyeball stereotyped pressing) was effective in decreasing of the aforementioned behavior.

#### REFERENCES

BEAR, M. F.; CONNORS, B. W.; PARADISO, M. A. Neurociências: desvendando o sistema nervoso. Artmed, 855p., 2002.

BENDA, W. Hippotherapy and the significance of complementary and alternative medicine: a Q&A with Willian Benda. Alternative and Complementary therapies, v. 13, n. 5, p. 266-268, 2007.

LENT, R. Cem bilhões de neurônios: conceitos fundamentais de neurociência. In: \_\_\_\_\_. Os sentidos do corpo: estrutura e função do sistema somestésico. São Paulo: editora Atheneu, 2004. p. 210-239.

LOURENÇO, E. A. G.; HAYASHI, M. C. P. I.; ALMEIDA, M. A. Delineamentos intrasujeitos nas dissertações e teses do

#### PPGEEs/UFSCar. Revista Brasileira de Educação Especial., v. 15, n. 2,

p. 319-336, 2009.



