

Short Communication

Children with Ataxia in Conductive Education

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Submitted: 16 September 2020**Accepted:** 29 September 2020**Published:** 30 September 2020**ISSN:** 2334-2307**Copyright**

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OPEN ACCESS**Keywords**

- Pető method
- Conductive education
- Ataxia

Abstract

Impaired coordination caused by cerebral, cerebellar or spinal impairment, with hypoxic or genetic causes, answer to the Pető's conductive education quite fair. It might mean the most favorable facilitation for developmental processes and by the so called structural cerebellar reserve or by extra-cerebellar parts of the brain.

ABBREVIATIONS

CP: Cerebral Palsy; CE: Conductive Education

INTRODUCTION

An accumulation of children with ataxia can be observed in conductive educational services worldwide.

MATERIALS AND METHODS

Based on the files of previously assessed children with ataxia will be create soon special conductive educational groups. They get an age and mental level adapted agenda built with regular items, a daily routine with successful actions, and to movement elements suit the kindergarten or school goals.

RESULTS

Among children with cerebral palsy (CP), up to 1-2% of cases can be classified as "Ataxia" [1]. The congenital cerebellar ataxia rarely proves to be "true," non-progressive CP [2]. Otherwise, signs of deficient coordination are present in all forms (uni- and bilateral) of CP [3]. This has been termed spastic-paretic ataxia [4] by old neurologists, suggesting cerebral, cerebellar, and spinal causes alike. All coordination disorders, especially those with hypotonia, require detailed, demanding neurological assessment (including genetics). The age specific appearance of signs, stagnation or deterioration of symptoms and manifestation of coordination disorder (disturbance since infant age, alteration in facial expression and swallowing, vocalization, chanting breath, metric speech, nystagmus, insufficiency in static and dynamic posture, gross and fine motor impairment - with or without cognitive and mental delay or deficiency) orientate for diagnostics. In ataxia, brain image examinations are not to be let out. Neurology might expect a lot from the tractography and then the connectome.

DISCUSSION AND CONCLUSION

It is a long time experience of neurologists that even clinical examinations caused by a structural or functional cerebellum-

induced abnormal coordination test, become increasingly successful with repeated new trials – even in a few minutes. Some elements of classical neurological tests for coordination adapted to age can be used extremely advantageously in rehabilitation, including conductive education (CE), e.g. imitated play – finger movements on imaginary piano keys, rhythmic, bilateral synchronous or alternating movement series. These are applied also in Pető's CE which uses holistic, pedagogical tools for the global upbringing of infants and children [5,6]. The most powerful facilitation tool in CE is called rhythmical intention, intention created by motivation, maintained by rhythm (counting, songs, and music), with modified intonation and appropriately varying rhythm – with as little manual help as possible. The earliest benefit of CE can be measured quite soon on the basis of the more favorable coordination, which at the same time – by influencing cognition – also brings about improvement in the activities of daily living [7]. Impaired coordination can be compensated by developmental processes and by the so called structural cerebellar reserve or by extracerebellar parts of the brain [8,9]. Neither CE nor western style or any alternative procedure can affect chanting speech and nystagmus. Started at an early age, the long-term CE is effective in all forms of CP, especially in ataxia, athetosis, and in developmental coordination disorder.

"In a nutshell, I have argued that during the past tens of thousands of years the cerebellum has silently (the cerebellum operates below the level of conscious awareness) produced human culture. And not only that, I argue that it is the cerebellum that has allowed humans to constantly advance the key pillars of culture, everything from rearing practices to everyday customs, art, science, music, and technology" [10].

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Cite this article

Balogh E, Szabó ÉF (2020) *Children with Ataxia in Conductive Education*. *J Neurol Disord Stroke* 7(4): 1167.