RESEARCH PAPER International Journal of Medical Sciences (April & October, 2011) Vol. 4 Issue 1& 2 : 39-45

A Study on Vojta Therapy Approach to Improve the Motor Development of Cerebral Palsy Children

S. SENTHILKUMAR AND P. SWARNAKUMARI

ABSTRACT

Background: The purpose of the study of Vojta therapy is to facilitate the regulation or control of the body's position, to facilitate the support function of the extremities, and to stimulate coordinated muscle activity. It has been scientifically proven to be effective in various pathologies in cerebral palsy children where the movement of the body was affected neurologically due to irregular maturation of the central nervous system, abnormal motor development, motor delays and other conditions affecting movement of the spine and body.

Objective: The aim of the study was to determine the effectiveness of Vojta therapy approach to improve motor development of cerebral palsy children.

Design: Experimental study.

Participants: The cerebral palsy children's were solicited selected from the Udhaya School and blossoms school for intellectual challenged homes Thiruchirappalli, Tamilnadu, India. The age group of children's are (n =38, age 3 months to 5 years old.) pre intervention assessed by Peabody motor development scale and the Vojta technique is applied for continuously 3 months, after the post intervention should be assessed. Measurements: Peabody development motor scale, milestones chart.

Results: All the cerebral palsy children included in the study completed the six sessions of the exercises and were re-evaluated at the three-month follow-up. The two-tailed P value is less than 0.0001, by conventional criteria; this difference is considered to be extremely statistically significant.

Conclusion: In general, we conclude that the application of a Vojta therapy program has positive effects on the child's capability as well as the performance (independence) of daily functional motor skills in cerebral palsy.

See end of the article for authors' affiliation

Correspondence to :
S. SENTHILKUMAR
Department of Orthopaedic Physical Therapist, Holy Cross College,
TRICHIRAPPALLI (T.N.) INDIA

Senthilkuamr, S. and Swarnakumari, P. (2011). A Study on Vojta Therapy Approach to Improve the Motor Development of Cerebral Palsy Children *Indian J. Med. Sci.,* **4**(1 &2):39-45.

Key words : Cerebral palsy, Vojta therapy, Motor development

Received : *August, 2011*
Accepted : *September, 2011*

Cerebral palsy (CP) refers to a group of posture and movement disorders occurring as a result of a non progressive lesion of the developing central nervous system. Sir John Little an English orthopedics was the first to describe this disease, even though he did not employ the term "cerebral palsy" in his famous work of 1862. A new entity was then defined and named "Little's Disease".

A group of non-progressive, but often changing, motor impairment syndromes secondary to lesions or abnormalities of the brain" — (Mutch *et al.,* 1992) (7, 5)

CP has been classified based on the type of motor disorder, with variable numbers and descriptions of types. The revised classification now in use defines the following four main categories of motor disorder (5):- Spastic (70-80% of cases): quadriplegia (10-15%):

All four extremities are affected equally along the trunk; diplegia (30-40%): lower extremities are affected to a greater degree than the upper extremities; hemiplegia (20-30%): involvement is noted in one side of the body, including the arm and the leg; monoplegia (rare): involvement is observed on one limb, either the arm or the leg;- Dyskinetic or Athetoid (10-15% of cases);

- Ataxic (< 5% of cases); and mixed forms (most often spasticity and athetosis, less often ataxia and athetosis). CP is caused by an insult to the immature brain at any time prior to birth up to 2 years of age. The early central nervous system (CNS) damage results in chronic physical disabilities and often includes sensory impairments. Cerebral insult produces alterations in muscle tone, muscle stretch reflexes, primitive reflexes, and postural reactions. (6,10) Other associated symptoms may be involved secondary to the neurological insult (mental retardation, speech, hearing and vision problems, perceptual disturbances, epilepsy). 54 per cent of children have more than one associated disability (6).The etiology