## **Physical Therapy Department for Growth and Development Disorder in children and Its Surgery**

# Doctoral Degree 2001

Author	:	Alaa Ibrahim Ismail.
Title	:	Transcranial magnetic stimulation for evaluation and modulation of central motor pathway in hemiparetic
		cerebral palsied children.
Dept.	:	Physical Therapy Department for Growth and
		Developmental Disorder in Children and its Surgery.
Supervisors	1.	Emam Hassan El-Negamy.
	2.	Ann A. Abdel-Kader.
	3.	Maged M. Abdel-Naseer.
Degree	:	Doctoral.
Year	:	2001.
Abstract	:	

Thirty subjects invited in this study, with age ranging from 3 to 6 years. They divided into two equal groups (study and normal). Subjects of the study group were spastic hemiparetic cerebral palsied patients. The study group subjected to a physical therapy program for six month's period. transcranial magnetic stimulation parameters and foot print parameters were recorded for every patient in the study group before and after treatment, while recorded once only for the normal group. Results showed prolongation of the cortical MEP latency and CMCT as well as reduction of the cortical MEP amplitude and duration in the study group when compared to the normal group. CMCT was the only TCS parameter that reduced after the application of treatment. In addition, the inter-side differences of both cortical MEP latency and CMCT were also reduced after treatment. Step and stride lengths are decrease in hemiparetic children while foot angle is increased with almost unchanged step width. After treatment the step and the stride lengths of the affected lower limb were increased while the foot angle and the step width were decreased.

Key words	1.	Transcranial magnetic.
	2.	magnetic stimulation.
	3.	hemiparetic cerebral palsied.
	4.	cerebral palsied children.
	5.	children.
Arabic Title Page	:	التنبيه المغناطيسي عبر خلايا المخ لتقييم وتعديل المسار الحركي في حالات
		الاطفال المصابين بالشلل المخي النصفي.
Library register number	:	802-803.

Author	:	Fatma Abd El-Fattah Hegazy.
Title	:	Influence of long exposure to electromagnetic field on
		immune system and elucidation of the issue of infantile
		health impact.
Dept.	:	Physical Therapy Department for Growth and
		Developmental Disorder in Children and its Surgery.
Supervisors	1.	Fadel Mohamed Ali.
	2.	Kamal El-Sayed Shoukry.
	3.	Hoda Abd El-Azim El-Talawy.
Degree	:	Doctoral.
Year	:	2001.
Abstract	:	

EMF is considered on of the common used modalities in the field of the physical therapy. Physical therapists use almost all types of EMF (high, middle, and low frequency EMF) in the management of different cases. Recently, there are many diseases (cancer one of them) increased with high percentage as compared with the years before 1990. Therefore, the aim of this work is to investigate the effect of EMF on the alterations and in spleen and lymph nodes as secondary lymphoid organs by using optic and electron microscopy. for this purpose 90 albino rats , were divided into three equal groups , namely control (C)unexposed group , intrauterine (I.U.) , and post-natal (P.N.) exposed groups , 10 animals died at I.U. group and 2 at P.N. group during running of the experiment. other animals , (at 3 weeks old)from different groups were anaesthetized with ether , the blood samples were collected from eye vein by heparinated capillary tubes and blood films were done. Then the dissection of animals was done the four lymphoid organs were taken to the processing of optic and electron microscope. The results suggested cause-effect relationship between exposure to EMF for a long duration, and the development of myeloid leukemia and malignant lymphoma.

Key words	1.	Electromagnetic.
PHYSICA	2.	immune system.
	3.	Elucidation.
	4.	infantile health.
Arabic Title Page	:	اثر التعرض لمجال كهرومغناطيسي لفترات طويلة علي الجهاز المناعي واستنباط نتائجه على صحة الطفل.
		واستنباط نتائجه علي صحة الطفل.
Library register number	:	832-833.

Author	:	Gehan Hassan El-Meniawy.
Title	:	Investigation into technique for improving posture of
		adolescent girls with thoracic hypnosis.
Dept.	:	Physical Therapy Department for Growth and
		Developmental Disorder in Children and its Surgery.
Supervisors	1.	Amira Mohamed El-Tohamy.
	2.	Alaa El-Din El-Zoheiry Mahmoud.
	3.	Hassan Galal Mourad.
Degree	:	Doctoral.
Year	:	2001.
Abstract	:	

The aim of the present study was to determine the effect of three-dimensional dynamic correction, via a specially designed jacket with traction, when added to chiropractic adjustment and exercise therapy on lymphatic deformity, in adolescent girl. Forty adolescent girls suffering form non-bony structural hypnosis, ranging in age from 15 to 18 years (X' 16.43+ 0.817 yr .) represented the sample of this study. They were free from any associated deformities other than hypnosis of the thoracic spine. The angle of hypnosis of the study sample was chosen according to the Cobb's angle to be ranging from 50 to 65 degrees. Evaluation for each girl of both groups was conducted before treatment, after three month, and after six months of treatment. Changes in the degree of hypnotic curve were determined for each girl of both groups, via measuring the Cobb's angle and using the flexible ruler. Girls representing the sample of this study were then divided randomly into two equal groups (I and II). Group I (control) received chiropractic adjustment and a designed exercise program, while group II (study) received three-dimensional dynamic correction, in addition to chiropractic adjustment and the exercise program given to group I. The results of the present study after the suggested period of treatment revealed significant improvement in all measuring variables of group II after three months and after six months of treatment as compared with each other and with its per-treatment results and also with the posttreatment results group I ( after three months and after six month of treatment ). However, no significant deference was observed when comparing the pre-treatment results of groups I and II. So, it is recommended that three-dimensional dynamic correction could be used in conjunction with chiropractic adjustment and exercise therapy for correcting non-bony structural hypnosis in adolescent girls.

2. adolescent girls.   3. thoracic hypnosis.   Arabic Title Page :   البنات.   Library register number :   846-847.	Key words	1.	Posture.
استقصاء عن أسلوب علاجي لتحسين قوام حالات الحدب في مرحلة البلوغ عند : Arabic Title Page البنات.	THES	2.	adolescent girls.
البنات.		3.	
• •	Arabic Title Page	:	
Library register number : 846-847.			البنات.
	Library register number	:	846-847.

Author	:	Samia Abdel-Rahman Mohammed.
Title	:	Effect of cross- education program on certain perceptual motor activity in spastic hemipaetic children.
Dept.	:	Physical Therapy Department for Growth and Developmental Disorder in Children and its Surgery.
Supervisors	1.	Amira M. El – Tohamy.
	2.	Amine H. Salem.
	3.	William P. Bartlett.
Degree	:	Doctoral.
Year	:	2001.
Abstract	:	

The purpose of this study was to investigate whether cross-education is an effective modality in improving the performance of the affected upper extremity in specific perceptual motor activity used to improve the gross manual dexterity as well as to compare between the effect of two suggested types of the cross-education program (independent and partially independent). the box and block test as well as the percentage of motor learning were used to assess the performance of the affected upper extremity. the box and block activity and the ring container activity were used for the cross-education program in addition to the traditional physical therapy program . forty-five children with spastic hemiparetic cerebral palsy participated in this study, they were divided into three equal groups, group (I)received the independent cross-education program , group (II)received the partially independent cross-education program and group (III) received neither the independent nor the partially independent cross-education program in the habilitation of the upper extremity in spastic hemiparetic cerebral palsied children. The results also revealed the superioritic of the partially independent cross-education program might be used in conjunction with the traditional physical therapy program during the habilitation of; the upper extremely in spastic hemiparetic cerebral palsied children.

Key words	1.	cross-education.
	2.	bilateral transfer.
	3.	Contralateral.
THES	4.	Hemiparesis.
	5.	cerebral palsy.
Arabic Title Page	:	تاثير بر <mark>نامج التعليم المتبادل على نشاط إدراكي حسى حركي معين في الأطفال</mark>
		المصابين بالشلل النصفي التشنجي.
Library register number	:	798-799.