

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT FOR NEUROMUSCULAR AND
NEUROSURGICAL DISORDER AND ITS SURGERY**

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

**Physical Therapy Department for Neuromuscular and
Neurosurgical Disorder and Its Surgery**

Master Degree 2020

Author	:	Asmaa Fekry Gabre Tahoon.
Title	:	Assessment of spino pelvic alignment in patients with cervical Radiculopathy.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Hoda Mohamed Zakria.
	2.	Magdy khairy Ahmed samra.
	3.	Ahmed Shawky Ali Salem.
Degree	:	Master.
Year	:	2020.
Abstract	:	
<p>Background: Cervical radiculopathy is a relatively common neurological disorder resulting from nerve root dysfunction which is often due to mechanical compression. Much less attention has been given to the effect of cervical radiculopathy on spino- pelvic alignment. Purpose of the Study: To investigate the effect of cervical radiculopathy on spino-pelvic alignment . Methods: A cross-sectional observational study was carried out over One hundred (100) subjects of both sexes with age ranged from 30-50 years, The subjects were assigned in to two equal groups: Group (I): The study group (fifty subjects with unilateral, lower cervical radiculopathy(c3-c7) which is more than six months), Group (II): The control group (fifty normal matched subjects. Rasterstereography (Formetric 2), was used to measure the effect of cervical radiculopathy on thoracic kyphosis , lumbar lordosis and lateral pelvic tilt . Results: The results revealed a significant increase of the mean values of the thoracic kyphosis , lumbar lordosis and pelvic tilt in the study group (GI) in comparison to the control group (GII) (p<0.05). Conclusion: Cervical radiculopathy has a significant effect on spino- pelvic alignment. The thoracic kyphosis , the lumbar lordosis and the lateral pelvic tilt , have been increased in patients with cervical radiculopathy and this should be taken in consideration in the rehabilitation of patients with cervical radiculopathy.</p>		
Key words	1.	Spino-Pelvic Alignment
	2.	cervical radiculopathy
Classification number	:	000.000.
Pagination	:	66 p.
Arabic Title Page	:	تقييم محاذاة الحوض و العمود الفقري في مرضى اعتلال الجذور العنقى.
Library register number	:	6953-6954.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT FOR NEUROMUSCULAR AND
NEUROSURGICAL DISORDER AND ITS SURGERY**

Author	:	Dania Sherif Ibrahim Farid.
Title	:	Prevalence of central fatigue in stroke patients and its relation to functional recovery.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Wael Salah Shendy.
	2.	Hossam Salah Mourad,
	3.	Ahmed Shawky Ali
Degree	:	Master.
Year	:	2020.
Abstract	:	
<p>BACKGROUND: Central fatigue is a common symptom after stroke's incidence. It interferes with the whole rehabilitation process and a limiting factor to actively participate in the environment as well as different functional and daily activities. PURPOSE: To determine the prevalence of central fatigue in stroke patients and to investigate the impact of central fatigue on their functional recovery. METHODS: One hundred chronic stroke patients from both genders were recruited from The outpatient clinics of The Faculty of Medicine and The Faculty of Physical Therapy, Cairo University. The Study was conducted from 1st July 2019 to 31st December 2019. Demographic data were collected (age, sex). Central Fatigue was assessed by using the Fatigue Severity Scale (FSS) and the Modified Fatigue Impact Scale (MFIS). The functional recovery was evaluated by the Barthel's Index (BI). The demographic data and the functional recovery were correlated to the central fatigues' outcome measures. RESULTS: The prevalence of central fatigue in stroke patients was 62% using the FSS and 66% using the MFIS indicating more sensitivity of the MFIS than FSS. There was a significance increase in the severity and the impact of the central fatigue in the females ($p < 0.05$). The correlation between BI and FSS was a significant moderate negative correlation ($r = -0.42$, $p = 0.0001$) and between BI and MFIS was a significant moderate negative correlation ($r = -0.50$, $p = 0.0001$). CONCLUSION: The central fatigue is moderately prevalent among chronic stroke patients with 62% using the FSS and 66% using the MFIS showing more sensitivity of the MFIS in evaluating the central fatigue symptoms. The central fatigue is significantly prevalent in the females more than the males stroke survivors. It has a moderate negative significant correlation to the patient's functional recovery. This indicates that the patient's ability to act independently in different functional activities could be related to the presence and the severity of the central fatigue symptoms. It could act as one of the barriers for the stroke survivors to their physical recovery.</p>		
Key words	1.	Stroke.
	2.	Barthel Index.
	3.	Fatigue Severity Scale.
	4.	Functional recovery.
	5.	Modified Fatigue Impact Scale.
	6.	Fatigue.
Classification number	:	000.000.
Pagination	:	101 p.
Arabic Title Page	:	مدي انتشار الإرهاق المركزي في مرضى السكتة الدماغية المزمنة وعلاقتها بالتحسن الوظيفي.
Library register number	:	7249-7250.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT FOR NEUROMUSCULAR AND
NEUROSURGICAL DISORDER AND ITS SURGERY**

Author	:	Dina Abd El Aziz Abd El Salam Mohamed.
Title	:	Effect of L4 mobilization and posterior pelvic tilting exercise on sciatica in spondylolisthesis.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Eman Samir Mohamed Fayez
	2.	Sandra mohamed
	3.	Heba Ahmed Metwally
Degree	:	Master.
Year	:	2020.
Abstract	:	
<p>Background: Sciatica due to lumbar spondylolisthesis is an important medical and socioeconomic problem that affects the quality of life. It is described as a radiating leg pain. Aim of study: The current study was conducted to determine the effect of fourth lumbar vertebra (L4) mobilization combined with posterior pelvic tilting exercise on sciatica in spondylolisthesis patients. Methods: Sixty female patients with unilateral sciatica represented the sample of the study. Their ages ranged from 45 to 65 years. They were randomly assigned into four equal groups; Group (A): received designed physical therapy program (ultrasound and transcutaneous electrical stimulation). Group (B): received same designed physical therapy as (group A) in addition to posterior pelvic tilting exercises. Group (C): received same designed physical therapy as (group A) in addition to lumbar mobilizations on L4 vertebra. Group (D): received same designed physical therapy as (group A) in addition to combination between lumbar spine mobilizations on L4 and posterior pelvic exercises. Each patient in the four groups was evaluated by visual analogue scale (VAS) to assess pain, Roland Morris Disability Questionnaire (RDQ) to evaluate the patient's functional disability and Modified Morris Disability Scale for sciatica (RMS-L) to evaluate leg radiation before and after four weeks of treatment. Results: Group (A) showed significant decrease in the VAS by 7.51%, RMS-L by 6.29% and RDQ by 9.09%. Group (B) showed significant decrease in the VAS by 33.43%, RMS-L by 27.77% and RDQ by 38.94%. Group (C) showed significant decrease in the VAS by 8.66%, RMS-L by 11.81% and RDQ by 20.65%. Group (D) showed significant decrease in the VAS by 57.85%, RMS-L by 46.31% and RDQ by 54.88%. Conclusion: Adding posterior pelvic tilting exercise to L4 mobilization produce more favorable effect in improving VAS, RDQ, RMS-L than use of each modality alone. Also, the results show that posterior pelvic tilting exercise is better than lumbar mobilization</p>		
Key words	1.	Sciatica
	2.	Spondylolisthesis
	3.	L4 mobilization
	4.	posterior pelvic tilting exercise.
Classification number	:	000.000.
Pagination	:	81 p.
Arabic Title Page	:	تأثير تحريك الفقرة القطنية الرابعه وتمارين إمالة الحوض للخلف على عرق النساء في الانزلاق الفقري.
Library register number	:	7211-7212.

ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL THERAPY DEPARTMENT FOR NEUROMUSCULAR AND NEUROSURGICAL DISORDER AND ITS SURGERY

Author	:	Fatimah Ibrahim Abdul-Shafy.
Title	:	Efficacy of Sensory Re-Education Paradigm on Functional Outcomes In Patients With Carpal Tunnel Syndrome.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Hoda Mohamed Zakaria,
	2.	Ebtessam Mohamed Fahmy.
	3.	Youssef Mohamed Elbalawy
Degree	:	Master.
Year	:	2020.
Abstract	:	
<p>Background: Carpal tunnel syndrome (CTS) is the most common entrapment neuropathy due to compression of the median nerve as it travels through the wrist at the carpal tunnel. The function of the hand can be severely affected by the sole loss of sensibility of the hand even though motor function is normal. Until now there is no optimal physical therapy protocol for making patients with CTS satisfied with the functional outcomes therefore most of patients are refuge to surgical interference. Purpose of Study: To investigate the efficacy of sensory re-education paradigm on pain intensity, sensibility threshold, grip strength, symptom severity, and functional outcomes in patients with carpal tunnel syndrome. Subjects and Methods: Thirty patients suffering from mild to moderate carpal tunnel syndrome were enrolled. They were randomly assigned into two equal groups. The study group (A): received sensory re-education paradigm in addition to a standard physical therapy program. The control group (B): received the same standard physical therapy program only. Pain intensity level was assessed by the visual analogue scale (VAS), sensory function was assessed by Semmes-Weinstein monofilament (SWM), hand grip strength was assessed by hand held dynamometer and symptom severity and functional outcomes were assessed by Boston Carpal Tunnel Syndrome Questionnaire (BCTQ). The assessment was done before and after twelve treatment sessions. Results: There was a statistically significant improvement in pain intensity, hand grip strength and symptom severity in both groups post treatment. There was a statistically significant improvement in sensibility threshold and mean functional status score post treatment only in group (A) ($P<0.05$). A significant difference was recorded between both groups in favor of the study group in sensibility threshold, handgrip strength, and mean functional status score post treatment ($p<0.05$). Conclusion: Sensory re-education paradigm is a beneficial rehabilitation program in improving the functional outcomes in patients with CTS when it is added to the physical therapy program. Improvement in sensibility threshold and functional status gives this paradigm an additional superiority over the traditional therapeutic program since most patients show no improvement in sensibility even after surgical interventions.</p>		
Key words	1.	Carpal tunnel syndrome.
	2.	sensory re-education.
	3.	sensory relearning.
	4.	functional outcomes.
Classification number	:	000.000.
Pagination	:	p.
Arabic Title Page	:	فعالية البرنامج العلاجي المقترح لإعادة التعليم الحسي لتحسين النتائج الوظيفية في مرضى متلازمة ضيق النفق الرسغي.
Library register number	:	6979-6980.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
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NEUROSURGICAL DISORDER AND ITS SURGERY**

Author	:	Mariam Mohammed El Sayed.
Title	:	Effect of Life Kinetik Training on coordination in ataxic Multiple Sclerosis patients.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Moshera Hassan Darwish
	2.	Sandra Mohamed Ahmed
	3.	Heba Ahmed Metwally
Degree	:	Master.
Year	:	2020.
Abstract	:	
<p>Background: Ataxia is thought to occur in about 80% of multiple sclerosis patients. Ataxia or incoordination of movement affects most of daily activities. Aim of this study was to determine the effect of Life Kinetik Training on coordination (equilibrium and non-equilibrium) in ataxic Multiple Sclerosis (MS) patients. Methods: Thirty Relapsing and Remitting MS (RRMS) patients from both sexes represented the sample of the study. Their ages ranged from 20-45 years with Expanded Disability Status Scale (EDSS) score ranged from 1- 4 and Scale for Assessment and Rating Ataxia (SARA) ranged from 4-10. The patients were assigned into two equal groups; control group (GI) and study group (GII). The control group treated by a selective physical therapy program and the study group treated by the same program as (GI) in addition to Life Kinetik Training, “three” sessions per week, for “one” month. Cognitive functions were assessed by Mini Mental State Examination (MMSE). Standardized Finger- Nose Test (SFNT) was used to assess eye hand coordination. Nine Hole Peg Test (NHPT) was used to assess finger dexterity. Lower Extremity Motor Coordination Test (LEMOCOT) was used to assess lower limb coordination. Four Square Step Test (FSST) was used to assess dynamic balance. Results: Post treatment, there was significant improvement in all measured variables in both groups except FSST which improved only in (GII). Comparison of mean values post treatment between (GI) and (GII) revealed non-significant change in all variables except SFNT that showed more improvement in favor to GII. Conclusion: Life Kinetik Training has a positive effect on eye hand coordination only. It has no additional effect for physical exercises on finger dexterity, lower limb coordination and dynamic balance.</p>		
Key words	1.	Life Kinetik Training.
	2.	Ataxia.
	3.	Coordination.
	4.	Multiple Sclerosis.
Classification number	:	000.000.
Pagination	:	107 p.
Arabic Title Page	:	تأثير التدريب الحركي الحيوي على التوافق العصبي العضلي في مرضى التصلب المتعدد الترنحي.
Library register number	:	6963-6964.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
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NEUROSURGICAL DISORDER AND ITS SURGERY**

Author	:	Marwa Mostafa Abdel Moneem Afifi.
Title	:	Impact of diabetic polyneuropathy on ventilatory function and respiratory muscle endurance.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Moshera Hassan Darwish
	2.	Sandra Mohamed Ahmed
	3.	Heba Ahmed Metwally
Degree	:	Master.
Year	:	2020.
Abstract	:	
<p>Background: Diabetic polyneuropathy is one of the most common complications associated with diabetes mellitus. Respiratory neuromuscular function may be affected by polyneuropathy in type II diabetes. Objective: To determine the impact of diabetic polyneuropathy on ventilatory function and respiratory muscle endurance and to determine the effect of different degrees of severity of diabetic polyneuropathy on ventilatory function and respiratory muscle endurance. Patients and Methods: Ninety type II diabetic patients and thirty matched normal subjects from both genders represented the sample of the study. Their age ranged from 40 to 60 years. They were assigned into two groups; control group (G1) to provide the normal values of pulmonary function, and study group (G2). The study group was subdivided into three matched equal subgroups; (G2a) included diabetic patients without neuropathy; (G2b) included diabetic patients with clinically diagnosed neuropathy and (G2c) included diabetic patients with confirmed neuropathy with nerve conduction studies (NCS). The diabetic polyneuropathy was clinically assessed and rated by Toronto Clinical Neuropathy Scoring System (TCNS) and confirmed by NCS. Autonomic symptoms were assessed in all diabetic patients by Survey of Autonomic Symptoms (SAS). Ventilatory function (FVC, FEV1, and FEV1/FVC) and respiratory muscle strength (PEF) and endurance (MVV) were assessed by Jaeger Vyntus IOS spirometer. Results: revealed a significant decrease in all measured variables in both (G2b) and (G2c) when comparing with (G1) and group (G2a) except FEV1/ FVC ratio which is similar in four groups. Non-significant difference in FVC, FEV1, MVV and PEF between (G2b) and (G2c) or between (G2a) and (G1) was observed. A significant negative correlation was observed between the scores of TCNS and all measures of respiratory functions. A significant negative correlation between the age and MVV was detected. Conclusion: Diabetic polyneuropathy has a negative effect on neuromuscular pulmonary function and the severity of diabetic polyneuropathy is correlated with values of spirometry tests in type II diabetes. Assessment and management of respiratory neuromuscular dysfunction should be included in the management of diabetic polyneuropathy in type II diabetic patients.</p>		
Key words	1.	Diabetic polyneuropathy.
	2.	Respiratory muscle endurance.
	3.	Pulmonary function.
	4.	Spirometry.
	5.	ventilatory function.
	6.	Type II diabetes.
Classification number	:	000.000.
Pagination	:	118 p.
Arabic Title Page	:	تأثير اعتلال الاعصاب السكرى على الوظائف الرئوية و التحميل العضلى التنفسى.
Library register number	:	7045-7046.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
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Author	:	Mohamed Badr Mohamed Hassanein.
Title	:	Effect of Manipulative Physical Therapy on Nerve Root Functions in Discogenic Lumbosacral Radiculopathy Patients.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Eman Samir Mohamed Fayez
	2.	Khaled Ahmed Fawaz
	3.	Mohamed Abd Elhakeim Kasem
Degree	:	Master.
Year	:	2020.
Abstract	:	
<p>Background: Lumbosacral radiculopathy (LSR) is a common clinical problem that involves L5 and S1 nerve roots and often results in persistent disability. The use of spinal manipulative therapy (SMT) for patients with symptomatic lumbar disc disease has been suggested for the management of lumbosacral radiculopathy. Purpose: to investigate the effect of manipulative physical therapy on pain and nerve root function. Methods: Fourteen discogenic lumbosacral radiculopathy patients from both sexes participated in this study. They randomly assigned into 2 equal groups. Group A (Experimental): every patient received 3 sessions per week for 4 weeks consisted of 20 minute side posture positioning, rotatory mobilization and rotatory manipulation of lumbar spine, neurodynamic mobilization, and core stability. Group B (control): received program as Group A without neurodynamic mobilization. All patients assessed for back pain by Visual analogue scale (VAS), Disability by Oswestry disability index, and for soleus H-reflex amplitude (symptomatic, asymptomatic sides, and ratio between) by surface EMG unit, and fractional anisotropy, mean diffusivity (MD) & Apparent diffusion coefficient (ADC) (symptomatic & asymptomatic sides) by MRI. Results: There was significant improvement post treatment within both groups for all dependent variables in the symptomatic side except MD & ADC, but none in the asymptomatic side. Independent t-test revealed non-significant differences in any dependent variable (but ADC symptomatic post-score was more similar to asymptomatic pre-score in group A, than group B, that had a trend toward significance, P-value=0.1). Conclusion: Manipulative physical therapy has significant effect on clinical and radiological findings of the discogenic lumbosacral radiculopathy and neurodynamic mobilization had no statistically significant additive effect in treatment of these patients.</p>		
Key words	1.	Lumbosacral radiculopathy.
	2.	back pain and disability.
	3.	fractional anisotropy.
	4.	diffusion.
	5.	Manipulative Physical Therapy.
	6.	disc herniation - H-reflex
	7.	Nerve Root Functions.
Classification number	:	000.000.
Pagination	:	92 p.
Arabic Title Page	:	تأثير العلاج الطبيعي اليدوي على وظائف جذور الاعصاب فى مرضى اعتلال الجذور القطنيه الناتج عن الانزلاق الغضروفي.
Library register number	:	7121-7122.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
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NEUROSURGICAL DISORDER AND ITS SURGERY**

Author	:	Mohamed Yassin Abas Khalaf.
Title	:	Quantitative Assessment of Shoulder Proprioception in Patient with Chronic Mechanical Cervical Pain.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Wael Salah Shendy
	2.	Hatem Samir
	3.	Amina Awad
Degree	:	Master.
Year	:	2020.
Abstract	:	
<p>Background: Chronic mechanical cervical pain is a common condition that affects physically active young adult and adolescents. There is a direct relation between cervical region and shoulder region coming from the muscular and neural connection. Shoulder joint problems are also found to be common in patient with chronic cervical pain. However, the effect of chronic cervical pain on shoulder proprioception is still under research. Objective: To compare shoulder proprioception in patients with chronic mechanical cervical pain to a matched normal group. Methods: This study included two groups, 40 subjects (mean age 32.28±6.586) with mechanical chronic cervical pain and 40 healthy subjects (mean age 33.43±9.021) representing the control group. The primary outcome measure was the shoulder proprioception test of both upper limbs during active repositioning (ARP) and quantified with angular displacement error (ADP). Test was applied using an Isokinetic Dynamometer device (IKD) at angle of 30° for both shoulder internal and external rotation with an angular velocity of 30°/sec. Results: Participants with chronic mechanical cervical pain showed a significant absolute reposition error compared with normal subjects in both of shoulder external (p=0.000) and internal rotation (p=0.000) angles. Conclusion: Shoulder proprioception was majorly affected by the presence of chronic mechanical cervical pain.</p>		
Key words	1.	Mechanical cervical pain.
	2.	joint position sense.
	3.	shoulder proprioception.
	4.	Isokinetic Dynamometer.
Classification number	:	000.000.
Pagination	:	67 p.
Arabic Title Page	:	التقييم الكمي للاحساس العميق لمفصل الكتف في حالات الالم العنقى المزمن.
Library register number	:	6955-6956.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT FOR NEUROMUSCULAR AND
NEUROSURGICAL DISORDER AND ITS SURGERY**

Author	:	Mostafa Alsaid Mostafa Fahmy.
Title	:	Effect Of Resistance Exercise Program On Coactivation Of Both Lower Extremities In Chronic Stroke Patients.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Wael Salah Shendy
	2.	Yasser Tawfeek Salem
	3.	Hatem Samir Shehata
Degree	:	Master.
Year	:	2020.
Abstract	:	
<p>Background: Stroke is a frequent cause of problems in body function resulting in limitations of functional activity. Stroke generally leads to greater postural instability, and muscle weakening compared with healthy individuals. The strength of multiple muscle groups of both the paretic and non-paretic lower limbs have been shown to correlate with independence in sit to stand transfer and gait. Objective: to investigate if resistance exercises of non-paretic lower limb may improve the strength of paretic limb and the functional activities in patients with chronic stroke. Patients and Methods: 24 male patients with stroke represented the sample of the study. Their age ranged from 45 to 76 years. The Patients were assigned randomly into two equal groups; The control group treated by standard physical therapy program, and the intervention group treated by the same program in addition to resistance exercises program for adductors and abductors muscles of non-paretic extremity. Treatment session was one-hour session per day, 3 times a week for 6 successive weeks. Portable dynamometer was used to assess any increase in muscle forces of paretic and non-paretic lower limb muscles. Neurosoft Surface EMG was used to assess any change in pattern of activation (delay time) between both lower extremities. Also, functional independence measure scale (FIM) was used to assess any improvement in functional activities of these patients. All patients were assessed pre and post intervention. Results: The strength of paretic hip abductors and adductors improved significantly more in intervention group in comparison to control group. The delay time of both adductors and abductors decreased 15 % and 12%, respectively more in intervention group. FIM scores improved 7% more in intervention group. These changes in delay time and FIM was not significant in comparison to control group. Conclusion: Resistance exercises for non-paretic lower limb muscles showed short term significant improvement on paretic limb muscles strength without a significant change in ADL or delay time in patients with chronic stroke.</p>		
Key words	1.	Resistance exercises.
	2.	Chronic stroke.
	3.	Muscle strength.
	4.	Lower Extremities.
	5.	Non-paretic.
	6.	Function.
Classification number	:	000.000.
Pagination	:	79 p.
Arabic Title Page	:	تأثير برنامج تمرين المقاومة علي النمط العضلي بين الطرفين السفليين في مرضى السكتة الدماغية المزمنة.
Library register number	:	6989-6990.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
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NEUROSURGICAL DISORDER AND ITS SURGERY**

Author	:	Nermeen Hassan Abd EL Haleem.
Title	:	Effect of dexamethasone iontophoresis on controlling pain in patients with sciatica.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Eman Samir Mohamed Fayez
	2.	Maged Mohamed Abdel Naseer
	3.	Rania Mohamed Tawfik
Degree	:	Master.
Year	:	2020.
Abstract	:	
<p>Background: Sciatica due to lumbar disc lesion is an important medical and socioeconomic problem that affects the quality of life. The most important symptom is radiating leg pain. Aim of study: The current study was conducted to determine the effect of dexamethasone iontophoresis in controlling pain in patients with sciatica. Procedures: This study was conducted on thirty patients from both sexes with unilateral sciatica. The duration of illness ranged from six to eighteen months. Their ages ranged from 30 to 45 years. They were randomly assigned into two equal groups: the study group (A) and the control group (B). Group A (study group): this group received dexamethasone iontophoresis in addition to a selected physical therapy exercise program. Group B (control group): this group received a placebo dexamethasone iontophoresis in addition to the same selected physical therapy exercise program. Each patient of both groups was evaluated by visual analogue scale (V.A.S) to assess pain, goniometry to assess hip joint range of motion and Modified Oswestry low back disability questionnaire (O.D.I) to evaluate the patient's functional disability before and after four weeks of treatment. Results: In the present study there was a statistically significant increase of the mean values of the hip ROM. Also, there was a statistically significant decrease of the mean values of VAS and ODI in the study group compared to the control group post treatment. Conclusion: Dexamethasone iontophoresis has a significant effect in improving pain, functional abilities and hip ROM in patients with sciatica.</p>		
Key words	1.	Sciatica
	2.	Dexamethasone Iontophoresis
	3.	Exercise program.
	4.	Pain.
Classification number	:	000.000.
Pagination	:	90 p.
Arabic Title Page	:	تأثير عملية التآين بالديكساميثازون علي التحكم في ألم مرضي العصب الوريكي.
Library register number	:	7017-7018.

ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL THERAPY DEPARTMENT FOR NEUROMUSCULAR AND NEUROSURGICAL DISORDER AND ITS SURGERY

Author	:	Reham Kamal Mustafa.
Title	:	Relation between cognitive functions and quality of life in patients with spinal cord injuries.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Enas Elsayed Mohamed
	2.	Osama Refaat Ibrahim
	3.	Amina Mohamed Awad
Degree	:	Master.
Year	:	2020.
Abstract	:	
<p>Background: Cognitive impairment and poor quality of life (QOL) are reported to be correlated for many disorders. Objective: To find out the relation between cognitive functions and quality of life in patients with chronic traumatic spinal cord injury (SCI). Methods: A correlational study was conducted for a sample of forty patients with chronic SCI (33 males, 7 females, mean age was 32.42 ± 10.09 years). All participants underwent an assessment of cognitive function via Montreal Cognitive Assessment (MoCA) scale and an assessment of quality of life via self-rated quality of life index for SCI (QLI-SCI). Results: A significant correlation was revealed between the total QLI-SCI and MoCA scores ($p < 0.05$) in all domains of the QLI-SCI except health domain. Conclusion: There was relation between cognitive functions and quality of life in patients with SCI.</p>		
Key words	1.	Cognitive Functions
	2.	Quality of Life
	3.	Montreal Cognitive Assessment
	4.	Spinal Cord Injury
Classification number	:	000.000.
Pagination	:	69 p.
Arabic Title Page	:	العلاقة بين الوظائف الإدراكية وجودة الحياة لدى مرضى إصابات الحبل الشوكي.
Library register number	:	7265-7266.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT FOR NEUROMUSCULAR AND
NEUROSURGICAL DISORDER AND ITS SURGERY**

Author	:	Rowida Abd-Elglel Sayed.
Title	:	Relationship between Pelvic Alignment and Motor Recovery of the Affected Upper Extremity in Stroke Patients.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Enas Elsayed Mohamed
	2.	Amr Hassan
	3.	Heba Ahmed Metwally
Degree	:	Master.
Year	:	2020.
Abstract	:	
<p>Background: Delayed recovery of the upper extremity is one of major problems in stroke patients. Pelvic mal alignment may be one of the contributing factors of poor upper limb recovery after stroke. Aim:To investigate the relationship between pelvic alignment and motor recovery of the affected upper extremity in stroke patients. Methods: A cross-sectional study was carried out over sixty male stroke patients. Their ages ranged from 40-65 years. Digital pelvic inclinometer, trunk impairment scale (TIS), and Fugel Meyer Assessment scale (FMA) were used to assess pelvic tilt angles (antero-posterior and lateral), trunk control and upper limb motor recovery respectively. Results: There was a significant negative correlation between lateral pelvic tilt and both mean values of TIS and FM-UE score. A significant negative correlation between anterior pelvic tilt of the affected side and mean values of TIS score was observed. There was a significant positive correlation between FM-UE and TIS score mean values ($p<0.05$). Conclusion: A significant relation exists between pelvic alignment, trunk control and motor recovery of the upper limb. So, restoration of normal pelvic alignment should be considered to reach successful outcomes in motor recovery in stroke patients.</p>		
Key words	1.	Stroke
	2.	Motor Recovery
	3.	Pelvic Tilt
	4.	Trunk Control.
	5.	Upper Extremity.
	6.	Fugel Meyer scale.
Classification number	:	000.000.
Pagination	:	103 p.
Arabic Title Page	:	العلاقة بين وضع الحوض والتعافي الحركي للظرف العلوي المصاب في مرضى السكتة الدماغية.
Library register number	:	6961-6962.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT FOR NEUROMUSCULAR AND
NEUROSURGICAL DISORDER AND ITS SURGERY**

Author	:	Shorouk Mohamed Shabaan Ahmed.
Title	:	Prevalence of Mechanical Low Back Pain and Risk Factors Among Healthcare Providers in Cairo.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Moshera H. Darwish
	2.	Heba A. Khalifa
Degree	:	Master.
Year	:	2020.
Abstract	:	
<p>Background: Low back pain is a common cause of disability worldwide. Healthcare workers are particularly prone to it, because of the physical and emotional factors associated with their profession. Aim: To determine the prevalence, risk factors associated with LBP among healthcare workers in different Cairo hospitals (Educational hospitals, Police hospitals, Teaching hospitals, Health Insurance hospitals) in Cairo, Egypt. Subjects: Nine hundred participants from selected specialties (surgeons, physiotherapists, nurses) participated in this study. Their age ranged from 30-40 years. Methods: A cross-sectional study was conducted among 900 healthcare providers of three to ten years of working as a healthcare provider. Intensity of the pain and degree of functional disability were assessed by Visual Analogue Scale (VAS) and Oswestry Disability Index (ODI). Anthropometry, personal and occupational history were collected in addition to measuring scales. Results: The scores of Oswestry Disability Index revealed that 624 participants of the total sample have low back pain; 133 (22%) subjects had minimal disability, 390 (63%) had moderate disability and 101 (16%) subjects had severe disability. Prevalence of LBP among surgeons, physiotherapists and nurses were 183 (61%), 208 (69%) and 233 (78%) respectively. Gender, overweight, longer duration of practice, smoking and psychological stress had a negative influence on LBP among participants. Conclusion: Healthcare providers have considerably high prevalence of low back pain and functional disability associated with low back pain, affecting their social and work life. Occupational health and safety programs are recommended to control low back pain in this highly vulnerable occupational group.</p>		
Key words	1.	Prevalence.
	2.	Oswestry Disability Index.
	3.	Risk factors.
	4.	Low back pain.
	5.	Healthcare workers.
Classification number	:	000.000.
Pagination	:	93 p.
Arabic Title Page	:	مدى انتشار لالم اسفل الظهر الميكانيكا والعوامل المصاحبة لدى مقدمى الرعاية الصحية فى القاهرة.
Library register number	:	7301-7302.

ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL THERAPY DEPARTMENT FOR NEUROMUSCULAR AND NEUROSURGICAL DISORDER AND ITS SURGERY

Author	:	Walaa Essam El-Den Mohamed.
Title	:	Prevalence of Cervical Radiculopathy Among Otolaryngologists.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Nawal Abd El-Raouf Abo-Shady
	2.	Rasha Mohamed El Rewainy
Degree	:	Master.
Year	:	2020.
Abstract	:	
<p>Background: Otolaryngologists spend their work days in performing markedly precise procedures in confined specialty area. Therefore, they frequently adopt awkward neck, back and shoulder postures while using diagnostic and treatment devices. So the otolaryngologist's job profile puts them at high risk for musculoskeletal disorders like neck, shoulder and arm pains with numbness which may lead to cervical radiculopathy. Purpose of the study: was to investigate the prevalence of work related cervical neck pain with radiculopathy among otolaryngologist-head and neck surgeons. Method: specific questionnaires about radiculopathy and work effect based on Visual Analog Scale and Neck Disability Index were given to one hundred ENT physicians, head and neck surgeons of both genders, Age from 30 to 40 years selected from Ear, Nose and Throat Departments in Hospitals of Ministry of Health from 15 Egyptian governorates. The questionnaire and data sheet were delivered personally to all otolaryngologists - head and neck surgeons participated in the study. Results: The statistical analysis revealed that the prevalence of work related neck and armpain among otolaryngologists were (69%), and (21%) respectively. Conclusion: Work related neck pain is common among Egyptian Otolaryngologists, Making them at a high risk group. There is a need to improve ergonomics in the clinical and operative room settings and to educate and advice ENT physicians on ergonomic principles and architectural barriers with postural correction.</p>		
Key words	1.	Prevalence.
	2.	Cervical radiculopathy
	3.	Neck pain
	4.	Referred pain.
	5.	Otolaryngologists.
Classification number	:	000.000.
Pagination	:	100 p.
Arabic Title Page	:	انتشار اعتلال جذور الفقرات العنقية بين اطباء الأنف والأذن والحنجرة.
Library register number	:	7015-7016.