

Abstract: 34 - Date: 2019-05-14 15:21:14pm

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Topic of Summary

PRM in paediatric problems

Title of Summary

FEEDING PROBLEMS, GROWTH AND NUTRITIONAL STATUS IN CHILDREN WITH SEVERE NEUROLOGIC IMPAIRMENT AND INTELLECTUAL DISABILITY

Keywords

feeding; growth; nutrition; cerebral palsy

Authors

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Introduction

Feeding difficulties, common among children with cerebral palsy (CP), are currently lacking in children with severe neurologic impairment and intellectual disability. The aim was to estimate the prevalence of feeding and nutritional problems in children with severe cerebral palsy (CP) in Tunisia.

Materials & Methods

This was a cross-sectional study of 40 children with severe CP. The inclusion criteria were the following: age 2–19 y, proven or estimated IQ<55 y, and with Gross Motor Function Classification System (GMFCS) GMFCS levels 4 or 5. Anthropometric measurements (body weight, knee height, mid-upper arm circumference, and triceps skin-fold thickness) were taken. In addition, all the participants had a thorough evaluation of the feeding times, and the presence of gastrointestinal problems (drooling of saliva, vomiting, dysphagia, etc...).

Results

Oromotor dysfunction affected 70% of children, drooling of saliva were noted in 30 of cases and gastroesophageal reflux in 14 of cases. The meal was given in most cases by the mother and lasted on average 40 minutes. No children with gastrostomy tube feeding. The average skinfold value was 6.5 ± 3.5 mm and the mid-arm circumference was 16.1 ± 3.4 cm. The weight was on average 15Kg.

Discussion

Conclusion

Feeding problems in children with CP were common and associated with poor linear growth. A high proportion of the children were undernourished. Moreover, our results suggest that gastrostomy tube feeding may have been introduced too late in some children.

References

Abstract: 35 - Date: 2019-05-16 13:29:00pm

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Topic of Summary

Cardiovascular and pulmonary prevention and rehabilitation

Title of Summary

Early Rehabilitation Of Patients Having Undergone Associated Heart And Carotid Artery Surgeries

Keywords

Cardiac surgery, endovascular procedures, early rehabilitation

Authors

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Surgery; Rehabilitation

Introduction

Associated open heart and carotid artery surgeries are high-risk surgeries. A hybrid procedure of carotid artery dilatation with a subsequent same-day heart surgery can reduce surgical risk in this high-risk group of patients. The aim is to determine whether there is a difference in the speed of patients' recovery between patients after surgeries performed in one act – group A, and a group with endovascular interventions in carotid artery followed by a same-day open heart surgery – group B.

Materials & Methods

A retrospective analysis was performed at the Dedinje Cardiovascular Institute in the period from January 2018 to January 2019 there were 45 patients who had a combined carotid artery and open heart procedure. The post-operative rehabilitation was done based on general principles of rehabilitation through the dosing of loading and fatigue and continuous heart checks (blood pressure and heart rate).

Results

The group A had 32 patients with an average age of 67 years, and the mean Euroscore II value was 4,24. The early mortality rate was 6.25%, and a significant morbidity occurred within 5 patients (15.6%). The recovery time in this group was 6-21 days (10,27). The group B had 13 patients with the average age of 64.7 years, and the mean Euroscore II value was 4,61. The early mortality rate was 0%, and a significant morbidity occurred in 2 patients (15.3%). The recovery time in this group was 7-28 days (12,23).

Discussion

Conclusion

The patients had an equal recovery time after the procedure (P value was 0,27).

References

Abstract: 37 - Date: 2019-05-20 09:01:34am

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

Knee Osteoarthritis: Evidences for Regenerative injections, A brief literature review

Keywords

Knee osteoarthritis, Prolotherapy, PRP, Stem Cells, Mesenchymal Stem Cells, Amniotic fluid, Bone marrow derived MSC, Adipose derived MSC, Exosomes, Growth Factors

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Introduction

To find high quality evidences from clinical studies including RCTs, systematic reviews for regenerative injections available for Osteoarthritis of the knee

Materials & Methods

Literature review for the last 10 years for Clinical Studies, RCTs, Systematic reviews.

Results

Results will be mentioned in Table format

Discussion

Conclusion

The field of regenerative medicine is rapidly evolving. Current treatments focused mainly on injecting prolotherapy, PRP, adipose, bone marrow derived stem cells and amniotic fluid preparations in to the joint space. Latest studies indicate the role of exosomes in stem cell treatment. More rigorous high quality studies are needed in this field.

References

Abstract: 38 - Date: 2019-05-21 12:07:25pm

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

Electromyographic analysis of the scapular upward rotator muscles during 3 scapular rehabilitation exercises

Keywords

upper trapezius; serratus anterior; lower trapezius; scapular upward rotation; scaption; protraction

Authors

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Introduction

The purpose of this study was to compare the muscle activity of upper trapezius (UT), serratus anterior (SA), and lower trapezius (LT) muscles during two representative exercises used to strengthen SA muscles and newly designed scapular upward rotation (SUR) exercise.

Materials & Methods

29 healthy adult men participated in the experiment. All subjects performed scaption, protraction and SUR exercises with maximum isometric contraction. The SUR exercise was performed in the upward rotation direction of the scapula with fixed at 45 degrees from the ground in the sitting position. During the exercise, muscle activities of UT, SA, LT were recorded.

Results

The UT activity during scaption was significantly higher than UT activity during the protraction and SUR exercise. The UT activity during SUR exercise was significantly higher than protraction exercise. The SA muscle activity when performing the scaption was significantly higher than the muscle activity when the protraction was performed. Also, the SA muscle activity during the SUR was significantly higher than the muscle activity during the protraction. LT activity during scaption was significantly higher than LT activity during the protraction and SUR exercise. Also, LT activity during SUR exercise was significantly higher than protraction exercise.

Discussion

Conclusion

SUR exercise showed significantly lower UT muscle activity compared to scaption exercise, but there was no significant difference in SA muscle activity. In addition, the SUR showed significantly higher SA muscle activity than the protraction. SUR may be used as one of the effective ways to strengthen SA muscles while preventing excessive UT muscle activity.

References

Thanks to Won Young-soo, a researcher who helped collect data.

Abstract: 44 - Date: 2019-06-08 18:24:50pm

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Topic of Summary

PRM in paediatric problems

Title of Summary

ROLE OF PHYSICAL ACTIVITY IN THE TREATMENT OF ASTHMA SEVERITY IN OVERHALED ASTHMATIC CHILDREN ABOUT 95 CASES ASTHMATIC CHILDREN OVERLOAD IN THE REGION OF SIDI BEL ABBES

Keywords

severe asthma, obesity, physical activity, severity of asthma, child, obesity, overweight, weight loss, physical activity, GPAQ, GINA

Authors

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Introduction

Our study documents the impact of physical activity on the severity of asthma in obese or overweight children and adolescents attending school aged 8 to 19 in the wilaya of Sidi Bel Abbès.

Materials & Methods

We have conducted a pre- and post-mortem assessment survey of 95 overweight children with asthma. Two questionnaires: Global Physical Activity Questionnaire (GPAQ) and Global Initiative for Asthma (GINA) were used for the collection of anthropometric data and those for asthma and physical activity (PA). The assessment of the severity stage of asthma was made according to the national consensus of pneumology (2013). Children and adolescents in our

study performed AP for eight months in order to appreciate the change in Body Mass Index (BMI) on the one hand and especially to assess the severity of asthma on the other hand.

Results

The results of the Global Physical Activity Questionnaire (GPAQ) revealed a low level of physical activity in two-thirds of children. The results showed that the rate of overweight was significantly higher in children with low AP ($p = 0.003$). Following our intervention, an average peak exhalation rate (PEF) improvement of $(18.30 \pm 9.4)\%$ was observed and a significant correlation ($p = 0.05$) was noted between the percentage of the weight loss and improvement of the DEP.

Discussion

Conclusion

All of these data show that weight loss significantly improves the severity of asthma and that the integration of moderate to intense physical activity should be systematic in the therapeutic strategy of overweight or obese asthmatic children and adolescents.

References

Abstract: 55 - Date: 2019-06-23 10:39:51am

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Topic of Summary

Advances in PRM diagnostics

Title of Summary

Reasoning in electrodiagnosis

Keywords

Electrodiagnosis ;Reasoning

Authors

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Introduction

Identification of pertinent clinical data.\r\nidentification of electrodiagnostic reporting patterns.\r\nAnalysis of reasoning components in electrodiagnostic reports

Materials & Methods

Descriptive survey of pertinent clinical data;accuracy of the recorded and interpretation of electrophysiological data;reasoning components included in electrodiagnostic reports of 3200 studied patients in my Clinic during years 2002-2018.

Results

Pertinent clinical were synoptic in 83%;incomplete in 29%and adequate in 32%. Technical precision of recorded data was fulfilled in 77%. Over-and under-interpretation ;terminology errors;anatomic error were the prevailing inadequacies. Identification and comprehension components of reasoning were commonly of stereotyped patterns.The synthesis component was generally inadequate to serve the Logical internal accuracy and consistency of the synthesized ideas conducting to scientifically rational diagnosis. the clinical problem under testing. \r\n\r\n

Discussion

Conclusion

Reasoning in electrodiagnosis plays a role in narrowing the gap between conclusion derived from the obtained electrophysiological data and the medical truth about the nature of the clinical problem under consideration.

References

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Abstract: 61 - Date: 2019-06-24 08:45:15am

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Topic of Summary

Neurorehabilitation, spasticity

Title of Summary

EARLY REHABILITATION AFTER SURGICAL REPAIR OF ACUTE ANEURYSMAL SUBARACHNOID HEMORRHAGE

Keywords

subarachnoid bleeding, vasospasm, rehabilitation.

Authors

Andjela Milovanovic;Natasa Mujovic;Slavica Rajevic;Tatjana Medic; Tatjana Radovanovic;Ivan Selakovic;Sanja Tomanovic Vujadionovic

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Introduction

The protocol of early rehabilitation for these patients does not exist in the world, and this is why this research originated. To examine the connection between early rehabilitation and verticalization with vasospasm, ischemia, neurological findings and functional, as well as their recovery. As well as the most important to establish the protocol of early rehabilitation.

Materials & Methods

A randomized study was conducted at the Clinical Center for Neurosurgery of the Clinical Center of Serbia, from 2013 to 2015 Approved by the Ethics Committee of the Medical Faculty in Belgrade. 65 patients undergoing acute treatment were divided into group I (N = 34) who started early rehabilitation with verticalization starting 2-5 days from bleeding, group II (N = 31) who started early rehabilitation early on but were verticalized around the 12th days of bleeding. We followed: vasospasm, ischemia, neurological condition of the patient, functionality by functional independence assessment scale (FIM) on release, month and three after surgery.

Results

Group I had a significantly higher percentage of patients with ischemia than group II on release. Group I had a greater number of patients with group II hemiparesis after three months. Functionality is better in Group II than Group I.

Discussion

Conclusion

Early rehabilitation and verticalization has an effect on vasospasm, ischemia, neurological findings and functional, as well as their recovery. Verticalization of these patients should not be performed before the 12th day of bleeding

References

Abstract: 65 - Date: 2019-06-24 10:51:30am

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Topic of Summary

Sports injury rehabilitation

Title of Summary

Improvement of the shoulder kinematic and ergonomics for the preservation of upper limb function in wheelchair athletes.

Keywords

wheelchair athletes ; kinematic analysis; sEMG; prevention; sport injury

Authors

Andrea Demeco; Nicola Marotta; Gerardo de Scorpio; Angelo Indino; Annalisa Petraroli; Lucrezia Moggio; Roberto Bianchito; Teresa Iona; Antonio Ammendolia

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Introduction

The aim of this observational study is to verify if the guidelines for the preservation of upper limb function of the Consortium for Spinal Cord Medicine may be applicable to prevent sport injuries.

Materials & Methods

A group of 10 wheelchair basketball athletes not affected by acute tendinopathy of the shoulder who played at least from 5 years have been enrolled. We educated a healthcare provider to follow daily the athletes in the application of guidelines. The athletes underwent to a self-administered Kerlan–Jobe Orthopaedic Clinic (KJOC) Shoulder and Elbow questionnaire and a kinematic analysis coupled with surface electromyography before the beginning of the sport season (T0) and after the end (T1) in order to evaluate the efficacy of the propulsive stroke and the range of motion of the shoulder.

Results

KJOCSE score was higher at T1 than T0 with a mean increase of the 0,9 points in each item. The wheelchair propulsion techniques improved in pattern and acceleration at T1. The movement of the scapulothoracic joint during abduction of the upper limb, the abduction and external rotation of the glenohumeral joint were significantly higher ($p < .05$) at T1 than T0.

Discussion

Conclusion

The improvement of the shoulder kinematic and change of the ergonomics are related to the preservation of the upper limb function and the perception of a better physical capability. This study confirmed that the guidelines reduce the incidence of pain and cumulative trauma disorders of the upper limbs not only in people with spinal cord injury but even in wheelchair athletes.

References

Abstract: 69 - Date: 2019-06-25 12:32:17pm

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Topic of Summary

Orthotics and prosthesis in PRM

Title of Summary

Incidence of Achilles tendinopathy and / or plantar fasciitis in the surviving limb in above knee amputees

Keywords

Achilles Tendinopathy, Plantar Fasciitis, Lower limb amputee

Authors

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Introduction

To study the incidence of Achilles Tendinopathy and Plantar Fasciitis in the surviving limb in lower limb amputated patient.

Materials & Methods

Randomly selected patients meeting the inclusion criteria . ACT and PF were screened clinically using MSK ultrasound machine.\r\nAll patients were examined by the same clinician\r\nAll patients were scanned by the same Radiologists\r\nThe study was carried out at the SACM centre, Wythenshawe , UK\r\nSelection criteria: Established TFA , a minimum of 1 year. Full unrestricted use of the prostheses . Unaided walking . No predisposing injuries of previous trauma, fractures, tendon ruptures. No comorbidities : DM, heart diseases, alcoholism, neuromuscular disorders, poorly controlled COPD or asthma, inflammatory arthritis . No recent use of oral ABx namely Fluoroquinolones.\r\n

Results

1 patient: Symptomatic PF and ACT\r\n1 patient: pain PF, asymptomatic ACT\r\n1 patient: Painful ACT , Asymptomatic PF\r\n13 patients: completely asymptomatic\r\n\r\nPlantar fascia :Thickness range found: 2.7 – 5.5mm . 5 patient : < 3.5. 3 patients: 3.5 – 4 mm borderline. 5 patients : > 4mm thickened\r\n\r\nAchilles tendon: Thickness range found: 4.5 – 7.8mm . < 5.5 mm normal: 8 patient . 5.5 -6mm Borderline: 2 patients . > 6.1 mm thickened: 3 patients.

Discussion

Conclusion

ACT and PF pain is theoretically high in amputees\r\nHigher thickness of ACT and PF in asymptomatic can be considered normal for them\r\nFactors to be considered in this

study:\r\n\r\nVariation in prosthesis \r\n\r\nSmall size of the cohort\r\n\r\nAbsences of female participants \r\n\r\nVariation in length and level of use of prosthesis \r\n\r\nVariation in patient's weight

References

Abstract: 71 - Date: 2019-06-25 19:48:33pm

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Topic of Summary

Orthotics and prosthesis in PRM

Title of Summary

Challenges of the rehabilitation program in a multiple limb amputation patient- Case report

Keywords

multiple limb amputation, amputation rehabilitation, prosthesis

Authors

Chrysanthi Ntasiopoulou, PRM Doctor; Sokratis Sgoutzakos, PRM Doctor; Athanasios Permekerlis, General Surgeon; Dionysia Delaporta, Neurologist; Eirini Mouza, PRM Doctor, Medical Director.

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Introduction

Quadrilateral amputations are very rare. They are reported in blast injuries in troops. We are exploring the special considerations regarding the rehabilitation of a 17 year old unaccompanied refugee admitted to the rehabilitation center after undergoing amputation surgeries due to frostbites and gangrene. The patient suffered trans-tibial amputation of both legs and partial amputation of both hands.

Materials & Methods

A case study about the multifocal treatment and the supporting network that was established with therapists, translators, prosthetists and rehabilitation doctors in close collaboration with a non-governmental organization. Apart from the rehabilitation goals (muscle strengthening, improvement of ROM of joints, treatment of the inflammation of the surgical wounds and formation of the stumps, psychological support, cognitive improvement, nutritional support, independent gait training) the development of an alliance with the patient and the family via update and regular communication and establishment of short and long-term goals was basic. Special considerations and challenges were faced not only due to mixed upper and lower limb loss but also due to the lack of a nearby family environment, the presence of social and cultural differences and legal and financial issues.

Results

The patient improved considerably in every aspect. The improvement of the function of the hands allowed donning and doffing of the prosthesis independently. The patient is now training in independent gait without support.

Discussion

Conclusion

A complex supporting network is essential to achieve any goal in such cases. A lot must be done additionally in psychological support, integration, community interactions, language learning and job training.

References

Abstract: 72 - Date: 2019-06-26 08:48:15am

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Topic of Summary

PRM in geriatric conditions

Title of Summary

Intradialytic exercise programs - a review

Keywords

"hemodialysis"; "rehabilitation"; "intradialytic exercise".

Authors

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Introduction

The purposes of this review on exercise in hemodialysis patients are to identify: 1) the benefits and harms, 2) the motivations and barriers and 3) the most suitable intradialytic exercise programs.

Materials & Methods

Pubmed database performed with key terms "hemodialysis", "rehabilitation" and "intradialytic exercise" identified 8 relevant articles published until December 2018. We only considered articles regarding intradialytic exercise interventions.

Results

Exercising at least once a week improves quality of life, mental and physical functioning and sleep quality and decreases bodily pain and lack of appetite. Concerns over safety and type of exercise and impact on staff workload are specifically barriers identified for intradialytic exercise. Age is no formal barrier and elderly patients may even respond better to exercise programs. The majority of exercise interventions consists of two to three weekly sessions during hemodialysis treatments and are mainly aerobic exercise lasting from 30 to 90 minutes per session with intensities ranging from 60 to 80% of maximal oxygen consumption. Low intensity endurance training with cycle ergometer is also beneficial. Resistance muscular training can be prescribed alone or in combination with aerobic exercise, both demonstrating improvements in physical function. Exercise should be performed in the first 2 hours of dialysis sessions because of fatigue and hypotension risk. Concerns regarding vascular access complications while exercising may be addressed by privileging leg exercises during dialysis, leaving arm training to be performed prior to the treatment.

Discussion

Conclusion

Intradialytic exercise programs have proven to be beneficial even in elderly patients and therefore should be widespread.

References

Abstract: 73 - Date: 2019-06-26 10:17:58am

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Topic of Summary

PRM in paediatric problems

Title of Summary

Results of TIMP, AIMS and Griffiths scales in a sample of preterm children

Keywords

preterm; development; scales; TIMP; AIMS; Griffiths

Authors

Margarida Freitas; Susana Almeida; Graça Santos; Teresa Tiago; Sandra Gonçalves; Cristina Duarte

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Introduction

The Test of Infant Motor Performance (TIMP) is a functional motor scale for newborns and infants under 4 months old. TIMP can discriminate among infants with varying degrees of risk for poor motor outcome. Gross motor development of preterm infants can also be assessed by the Alberta Infant Motor Scale (AIMS). Griffiths-III is a measure for assessing the rate of development in infants up to 5 years. The purpose of this study is to assess the relationship between the scores achieved in TIMP, AIMS and Griffiths scales.

Materials & Methods

Our sample had a total of 208 preterm children who underwent the TIMP and AIMS tests between 2010 and 2016. A total of 116 children were assessed by the Griffiths test. After the TIMP scale was applied, children were classified in 4 degrees of risk - low, moderate, high and very high risk of poor motor outcome.

Results

We found a relationship between the TIMP results and the Griffiths scale (performed around the age of 5 years). Children with normal development had statistically significant better TIMP results. Children with developmental delays had previously obtained worse TIMP values. We verified that the AIMS scale also shows a positive correlation with the TIMP scale. Children considered to be at high risk according to TIMP, had lower AIMS values at 3 months of age.

Discussion

Conclusion

There is an association between these scales. TIMP seems to be predictive for motor and psychological development. It should be applied in order to start therapy and improve prognosis.

References

Abstract: 80 - Date: 2019-06-26 11:53:26am

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Topic of Summary

PRM in geriatric conditions

Title of Summary

PAIN AND NUTRITION IN PHYSIOTHERAPY

Keywords

Physiotherapy, pain, D vitamine, nutritional status

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Introduction

To assess the influence of a physiotherapy session on pain intensity and its relationship with nutritional status and D vitamin levels.

Materials & Methods

An observational, cross-sectional study was done for 84 patients treated in one day in the physiotherapy area. All patients were admitted to a Functional Recovery Unit. The pain level was analyzed prior, at the end and three hours after the sesión of the physiotherapeutic treatment. To measure the pain, we used an Visual Analogic Scale (VAS) Numeric Verbal Scale (NVA) and PAINAD scale according to the patient's comorbidity (visual impairment, motor coordination, dementia ...). Nutritional status and D Vitamin levels were determined by blood test. Epidemiological and clinical data of the patient were registered. The statistical analysis was carried out using the SPSS program v.21.

Results

The pain level was 3.1 + 3.5 before treatment and 2.90 + 3.4 at the end. Three hours after treatment, the pain value was 2.1 + 2.7, significantly lower than the initial one ($p < 0.05$). In those patients with D vitamin deficiency, the pain level was higher than in those with normal levels, without differences by sex or diagnosis. In malnourished patients, the pain value was lower than in patients without criteria of malnutrition $p < 0.01$. The improvement in pain was greater in amputees than in neurological and trauma patients.

Discussion

Conclusion

Physiotherapy treatment decrease the pain level specially three hours after treatment.\r\nDeficient levels of D vitamin are associated with higher pain level.\r\nPatients with malnutrition have less pain.\r\n

References

The authors wish to thank the Virgen de la Poveda Hospital management for allowing us to carry out the study and to staff and patients for their cooperation.

Abstract: 82 - Date: 2019-06-26 15:09:30pm

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Topic of Summary

Special body function problems e.g. spasticity, urinary system, sexuality, dysphagia, speech disorders and others

Title of Summary

Clinical and urodynamic evaluations of urinary disorders in Idiopathic Parkinson's Disease

Keywords

Parkinson's disease – Urodynamics - lower urinary tract symptoms

Authors

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Introduction

Patients with Parkinson's disease often have lower urinary tract symptoms (LUTS). They are associated with severely disturb the quality of life. The aim is to describe the clinical and urodynamic profile of bladder dysfunction in idiopathic Parkinson's disease.

Materials & Methods

A descriptive study was performed at the unit of urodynamic analysis in the Department of Physical Medicine and Rehabilitation for ten months from June 2017 to March 2018, including 40 patients with idiopathic parkinson's disease. The motor symptoms were assessed using Unified Parkinson disease Scale (UPDRS III). The overall severity was assessed according to the Hoehn and Yahr stage. Their urinary tract dysfunctions were rated using the Urinary Symptom Profile (USP). The urodynamic study was done in all patients.

Results

The mean patient age was 61.8+/-11.18 years. The average of UPDRSIII was 36.6+/-20.46. Median Hoehn and Yahr scale was 2. Clinical evaluation of LUTS revealed the predominance of irritative symptoms with an average overactive Bladder score of 9.6+/-4.75. Urodynamic evaluation revealed that the dominant bladder dysfunction was detrusor hyperreflexia in 65% of patients. Bladder hypersensitivity is found in 75% of cases. Bladder capacity is decreased in 55% of patients. Flowmetry showed a significant decrease Urinary flow rate in 50% of patients. Urethral pressure profile was normal in 70% of patients. USP scale had significant correlations with urodynamic abnormalities with P<0.05.

Discussion

Conclusion

The frequency and impact of LUTS in Parkinson's disease required adequate exploration and care to improve patient quality of life. Urodynamic investigations are necessary to choose the best treatment.

References

Abstract: 91 - Date: 2019-06-27 15:42:28pm

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Topic of Summary

Rehabilitation services in Mediterranean countries and Africa

Title of Summary

"Refer for Rehab": a local audit on referrals for inpatient rehabilitation services in Malta

Keywords

Rehabilitation Medicine; Referrals; Malta; Audit

Authors

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Introduction

Rehabilitation Medicine specialists face significant challenges when dealing with the assessment and selection of patients for inpatient rehabilitation services. Despite the great impact that this process has on healthcare resources and inter-specialist relations, evidence in this field is scarce (New PW. TOREHJ 2009; 2: 24-34). To this end, we present an audit on the details and outcomes related to patients referred for inpatient rehabilitation in Malta.

Materials & Methods

All referrals received from the months of April-August, 2018, requesting transfer for inpatient rehabilitation services in Karin Grech Hospital (KGH) were analysed. Details related to outcomes were obtained from electronic hospital records and analysed further using SPSS.

Results

A total of 116 patients were analysed. The majority of patients were referred from Orthopaedics (42.2%) followed by Neurosurgery (18.1%). 41.4% were accepted for transfer to KGH, with an average age of 59.1 years and an average waiting time of 4.8 days. The commonest reason for refusal was an excessively high level of independence at the time of consultation (12.9%). 81% of patients transferred to KGH were eventually discharged home with an average length of stay of 37 days (median 18 days); 7.1% needed transfer to the acute medical hospital while 11.9% were still at KGH, with an average stay of 200 days.

Discussion

Conclusion

More research is needed to identify best practices in assessment and patient selection for inpatient rehabilitation. Updating of guidelines and delivering inter-speciality education on the role of inpatient rehabilitation are currently being done locally to tackle the issue.

References

Abstract: 93 - Date: 2019-06-27 16:11:27pm

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Topic of Summary

Neurorehabilitation, spasticity

Title of Summary

Implementation of 6-week Bioness program for upper limb dysfunction– a pilot study

Keywords

functional electrical stimulation; hand; pilot study

Authors

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Introduction

To assess the feasibility and challenges involved in the implementation of a 6-week program of functional electrical stimulation (FES) of the upper limb using Bioness H200, at a local rehabilitation hospital.

Materials & Methods

Occupational therapists at Karin Grech Hospital for inpatient rehabilitation were trained in FES using Bioness H200. Patients with either hand weakness or increased tone were recruited and administered daily Bioness FES for 6 weeks, once contraindications were excluded. Tone, grip strength and manual muscle power were scored using the Modified Ashworth Scale, a hand grip dynamometer and the MRC scale respectively, once on first presentation and once immediately after completion. Data was collected using custom-designed proformas and later inputted on Microsoft Excel for analysis.

Results

9 patients were initially included; 1 patient was excluded due to the development of cardiac arrhythmias. Of the 8 patients included in the final study, 7 had unilateral paraparesis following stroke and 1 had bilateral upper limb weakness following cervical corpectomy. Analysis of parameters taken showed no significant change in tone within the 6 week period, with a mild increase in gross grip (mean= 1.66N), pincer grip (mean = 0.54N) and MRC score (mean =0.75) although these were not statistically significant.

Discussion

Conclusion

Successful training and standardisation of protocol on FES administration using Bioness H200, as well as quantification of various outcomes was achieved successfully and was found to be feasible, supporting a larger study to continue in this direction locally.

References

Abstract: 94 - Date: 2019-06-27 16:24:38pm

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Topic of Summary

Cardiovascular and pulmonary prevention and rehabilitation

Title of Summary

EARLY REHABILITATION IN PATIENTS WITH TEMPORARY PACE MAKER IN INTENSIVE CARE UNITS

Keywords

early rehabilitation, temporary pace maker

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Introduction

OBJECTIVE Cardiac rehabilitation (CR) is an effective but underprovided treatment for patients recovering from acute cardiac events i.e. acute myocardial infarction (AMI), percutaneous coronary interventions (PCI) and coronary artery bypass surgery (CABG). There are no any CR international guidelines for patients with a temporary pacemaker while there waiting for permanent one. The aim of this study is to define whether CR is effective and safe in the setting of temporary transvenous pacing.

Materials & Methods

We have examined 51 patients hospitalized in intensive care unit. Eighteen of them were hospitalized with diagnosis of acute myocardial infarction (AMI) complicated by AV block and 33 patients with AV block in other conditions. All patients have indications for temporary pacing. We have an early rehabilitation program on every day basis which includes exercise for peripheral circulation and sitting on the edge of a bed. Before and after the rehabilitation program we registered a blood pressure.

Results

There was not any significant rise of blood pressure observed during and after an early rehabilitation program, and there were no tachyarrhythmias and any other complication noticed.

Discussion

Conclusion

The CR will accelerate patients return to their desired levels of daily activity. It will also improve patient's satisfaction. In our study we haven't registered any complication during an early rehabilitation program. The patients were in satisfactory capacity. Although larger studies are needed, these data suggest that this program is safe and effective.

References

Abstract: 97 - Date: 2019-06-27 20:43:17pm

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Topic of Summary

PRM in paediatric problems

Title of Summary

THE ASSESSMENT OF THE QUALITY OF LIFE AFTER PERTHES DISEASE- more than 10 years following up study

Keywords

Perthes disease, Harris hip score

Authors

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Introduction

To evaluate the final outcome of Perthes disease measured by Harris hip score scale(HHS) and to identify the factors that have the greatest impact on long-term prognosis and whether there is a difference in the outcome in relation to the treatment method.

Materials & Methods

Following up observational study (from 1996-2018) that was carried out in Specialized Rehabilitation Hospital Banja Koviljaca and University Children's Hospital, Belgrade. The first group included 20 patients (22 hips) treated with Salter's osteotomy and the second 20

patients (23 hips) treated with Atlanta orthosis. \r\nThe range of motion of the hip and the limbs length were measured at the beginning of the research, also as Catterall and Herring classification. After a minimum of ten years clinical evaluation and HHS testing (<70 poor, 70-79 satisfactory, 80-90 good, 90-100 excellent result) were done.\r\n

Results

The average age of patients at the final examination was 19.04 years. The average HHS score in the first group was 88.04 and in the second 92.21. There was no statistically significant difference between groups ($p=0.099$). The statistically significant correlation of negative direction between HHS and age was found ($p<0.001$) as well as between HHS and initial damage (Catterall $p<0.021$, Herring $p<0.019$).

Discussion

Conclusion

The long-term outcome of Perthes disease according to the HHS is “excellent“ (90.17) , regardless of the type of treatment. The age at the onset of the disease and the degree of the initial anatomical damage have been determined as the most influential factors on the outcome.

References

Abstract: 102 - Date: 2019-06-28 09:06:59am

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Topic of Summary

Sports injury rehabilitation

Title of Summary

THE MANAGEMENT AND TREATMENT OF PATELLOFEMORAL PAIN SYNDROME

Keywords

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Introduction

Patellofemoral pain syndrome is the most common cause of knee pain in the outpatient setting. Originating from the contact of the posterior surface of the patella with the femur. It is

caused by physical and biomechanical changes in the patellofemoral joint during knee flexion, extension and particularly with overloading of the joint. \r\nThe purpose of this study was to focus on the implementation of a comprehensive rehabilitation program.\r\n

Materials & Methods

Thirty-three (33) participants with patellofemoral pain syndrome aged between 16-40 years were recruited. We separated them randomly in three groups a physical therapy a R.I.C.E (treatment) and a placebo group. The physical therapy group included quadriceps retraining, patellofemoral joint mobilization, tecar and daily home exercises. The R.I.C.E treatment consisted of Rest, Ice, Compression, Elevation, the placebo treatment consisted of sham ultrasound and light application of a nontherapeutic gel. \r\n\r\n

Results

All three groups have followed a course of rehabilitation and recovery for six weeks. At the beginning and at the end of the program, all the participants submitted to Lysholm score questionnaire. There was statistically significant difference between the physical therapy groups and placebo group. Patients in both treatment groups (physical therapy and R.I.C.E) demonstrated that the physical therapy group is more effective than R.I.C.E group.

Discussion

Conclusion

The results of this study indicate that the physical therapy is the first line of the treatment and R.I.C.E showed some effectiveness in the treatment of patellofemoral pain syndrome.

References

Abstract: 104 - Date: 2019-06-28 11:35:06am

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Topic of Summary

Neurorehabilitation, spasticity

Title of Summary

Strain sonoelastographic evaluation of gastrocnemius muscle intrinsic stiffness after botulinum toxin-A injection in children with cerebral palsy

Keywords

strain ultrasound elastography, cerebral palsy, botulinum toxin A injection, gastrocnemius muscle

Authors

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Introduction

To evaluate the stiffness of gastrocnemius muscle (GCM) in children with cerebral palsy (CP) by strain ultrasound elastography (EUS) and to study the sonoelastographic changes and its correlations with modified Ashworth scale (MAS) after botulinum toxin-A (BTA) injections.

Materials & Methods

This is a prospective study with experimental aim on children with spastic CP followed in the Physical Medicine department of Fattouma Bourguiba University Hospital in Monastir. A total of 15 children requiring BTA injections to GCM were included in the study. Muscle stiffness was evaluated by strain EUS before the procedure, 1, 2, 3 weeks, 1, 3 and 6 month post-injection. Stiffness was also assessed with the MAS at the same time. Strain index values (SIV) and MAS scores before and after the treatment were compared. A correlation between SIV and MAS grades before and after treatment was sought.

Results

The mean age was 6,8 years \pm 3,85 and the mean body weight was 21,4kg \pm 7,8. The average MAS score values were 2,5 before BTA. Abobotulinum toxin A injections were administered to 5 children with an average dose of 180 \pm 179,44 units and Onabotulinum toxin A injections were administered to 10 children with an average dose of 63 \pm 27,51 units in GCM. SIV were measured as 2,38 \pm 0,57 before BTA and as 1,7 \pm 0,66 one month after BTA. A positive correlation was also found between SIV and MAS grades ($r=0.791, p<0.01$) at different times of assessment.

Discussion

Conclusion

Strain EUS is a promising diagnostic tool for assessing stiffness in spastic muscles, in establishing the treatment plan and monitoring the effectiveness of the therapeutic modality.

References

Abstract: 107 - Date: 2019-06-28 13:47:12pm

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Topic of Summary

Pain management in PRM

Title of Summary

THE ROLE OF ULTRASSOUND GUIDED PROCEDURES IN PAIN MANAGEMENT

Keywords

Ultrasound; procedures; pain;

Authors

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Introduction

Access pain evolution and functional impairment in musculoskeletal conditions submitted to ultrasound guided procedures (UGP).

Materials & Methods

Prospective, observational, open study of patients that underwent an UGP between 11/2018 and 05/2019. Pain magnitude was evaluated through an assessment in which maximum, current and minimum pain levels were registered according to the numeric pain rating scale. Functional impairment in daily life activities (DLA) and quality of life (QoL) was assessed through a Likert scale. The assessment was performed presentially before the procedure, and by telephone inquiry 1, 3 and 6 months after the procedure. The following data are collected: date of procedure, sex, age, diagnosis, intervention area, type of procedure (infiltration, aspiration, hydrodistension, hydrodissection, needling), drugs (lidocaine, bupivacaine, methylprednisolone, betamethasone, triamcinolone, hyaluronic acid, saline solution). Patients that couldn't provide data or that underwent conventional rehabilitation, surgery or other procedure of the intervention area during the assessment period were excluded. IBM-SPSS software was used for data analysis and a p value <0.001 was considered statistically significant.

Results

268 procedures of 199 patients were initially included. 75% were women, medium age was 61.7 years (SD +13.3). There was a statistically significant improvement of maximum pain levels and pain impairment in DLA and QoL. The improvement on current and medium pain levels was not statistically significant.

Discussion

Conclusion

UGP are useful and effective in pain management, allowing improvement of functional independence in DLA and QoL. Limitations of the study: lack of control group, researchers were not blinded and difficulty of telephone inquiry.

References

- Centro Hospitalar Lisboa Ocidental's investigation department;\r\n- Centro Hospitalar Lisboa Ocidental's Physical Medicine and Rehabilitation department;

Abstract: 109 - Date: 2019-06-28 15:31:14pm

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

Evaluation of the Effectiveness of Treatment of Ankylosing Spondylitis Patients in the Thermal Spa and Thermal Galleries with Radon

Keywords

Spondyloarthritis, Rehabilitation-Radon, Klinikum Bad Gastein

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Introduction

For more than 70 years patients suffering from rheumatic diseases have been treated with Radon²²² in the Bad Gastein thermal galleries (37-41,5 °C). Hyperthermia treatment has been well documented to exert analgesic effects in inflammatory disorders and to reduce systemic levels of the anti-inflammatory cytokine. The individual treatment at Klinikum Austria-Bad Gastein includes a unique therapy combining radon-rich thermal spa (36-38 °C) and thermal galleries, resulting in significant benefits after 3 weeks, and continuing up to 6 months benefits vs. standard treatments. This study presented results of objective indicators of treatments.

Materials & Methods

Personalized treatment at Klinikum Austria, consisted of a 3-week therapy: individualised exercise, breathing exercise, hydro and mud-therapy, massage, radon-rich thermal spa (for 30 min.), targeted patient education and an average of 10 time admittance (per hour) to the thermal gallery. At admission and after treatment the following were observed: VAS (0-10), chest expansion, morning stiffness and BASDAI.

Results

28 patients analysed during 2018. \r\nAt discharge VAS was 60% better than at admission
\r\nAt discharge BASDAI was 35% better than at admission\r\nMeasurement of chest expansion: at discharge 25%\r\nimprovement compared to admission.\r\nMeasurement of morning stiffness: at discharge 42%\r\nimprovement compared to admission\r\n

Discussion

Conclusion

Through the individual rehabilitation programme a 60%\r\npain reduction was achieved in patients with AS after \r\ntreatment with low doses of Radon in the thermal galleries of\r\nBad Gastein and BASDAI as additional non-pharmacological therapy.\r\nThe treatment considerably increases the quality of patient's lives.\r\n\r\n

References

Abstract: 110 - Date: 2019-06-28 15:36:34pm

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Topic of Summary

Neurorehabilitation, spasticity

Title of Summary

The curved-Timed Up and Go test: a new tool to assess balance disorders in Parkinson's disease

Keywords

Assessment; validation; gait; rehabilitation

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Introduction

Patients with Parkinson's disease (PD) present often balance disorders. The Timed Up and Go (TUG) test is a validated test to assess balance disorders even in this population. Since curved walking – a functional walking - is affected in patients with PD we have developed a new test to assess balance in the curved walking: the Curved-TUG (c-TUG). Aim of this work is to offer a preliminary validation of the c-TUG in PD.

Materials & Methods

The C-TUG is similar to the TUG except for the walking direction that is curved. Patients have to walk on a colored line present on the floor having a radius of 1.2 meters. Stride length and

duration of the stance phase differ between the inner and outer leg. In this way one leg will be the inner in the going, while will be the outer in the coming.

At the moment, eleven patients with PD (74y.o.+10; 7 males) have been included in this study. They were assessed by means of the TUG, the Berg Balance Scale (BBS), the Falls Efficacy Scale (FES), and the 10 Meter Walk Test (10MWT).

Results

Preliminary results showed that the C-TUG correlated significantly ($p < 0.05$) with BBS (-0.75), FES (0.68) and 10MWT (-0.88), while the TUG correlated significantly only with 10MWT (-0.92).

Discussion

Conclusion

Considering these preliminary data, we can assume that the c-TUG could be a viable option to assess balance in PD, probably better than the TUG. These results need to be confirmed in a larger sample.

References

Abstract: 113 - Date: 2019-06-28 22:20:37pm

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Topic of Summary

Neurorehabilitation, spasticity

Title of Summary

Effectiveness of botulinum toxin in the management of children with spasticity

Keywords

botulinum toxin, spasticity, children

Authors

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Introduction

The interest of this study is to evaluate the effectiveness of botulinum toxin (BT) in the management of children with spasticity

Materials & Methods

A retrospective study was conducted in our department during 02 years [2017-2019]. This study included 60 children with spasticity who received a botulinum toxin injection. The assessment of spasticity pre and post-injection toxin was based on the Modified Ashworth Scale and the Functional Independence Measure for Children.

Results

The average age was 10,15 years [2,5-17], there was a modest male predominance (SR ; 1,30). The symptomatology was varied; cerebral palsy in 63%, and ischemic stroke in 20% . The assessment of spasticity was done by the Modified Ashworth Scale; 42% of the toxinated muscles were at 2, 40% at 3 and 4% at 4. The average of the Functional Independence Measure for Children was at 55/126. Botulinum toxin has been indicated for functional (80%) and/or hygienic (20%) reasons. The valuation of spasticity at 3 months after botulinum toxin injection; 15% of toxinated muscles were at 2, 25% at 1+ and 60% at 1, the average of Functional Independence Measure for Children was at 70/126

Discussion

Conclusion

Despite its misperception in our context and the difficulty of its realization, our study states the effectiveness of botulinum toxin injection in the treatment of spasticity as well as its place in improving functional disability in children. This injection must be complemented by an immediate rehab to stretch the toxinated muscles and restore their functions.

References

Abstract: 117 - Date: 2019-06-28 23:39:11pm

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Topic of Summary

Neurorehabilitation, spasticity

Title of Summary

Descriptive epidemiological study of the use of antiplatelet agents and / or anticoagulants in patients with spasticity treated with infiltration of IncobotulinumtoxinA for one year.

Keywords

antiplatelet, anticoagulants, spasticity, IncobotulinumtoxinA

Authors

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Introduction

Patients under treatment with anticoagulants or antiplatelet agents may have a higher risk of complications due to bleeding after intramuscular infiltrations.
Objective: evaluation of the use of antiplatelet agents and/or anticoagulants, of the patients who were infiltrated with incobotulinumtoxinA.

Materials & Methods

Descriptive, retrospective study of one year of the patients treated in the spasticity department. Variables: sex, age, spasticity cause, Side affect, type of anticoagulants/antiplatelet, cause for anticoagulation/antiplatelet therapy. Analysis: SPSS version19.0

Results

Total patients: 156 (90 men, 65 women). Spasticity causes: stroke 88, PCI 35, spinal cord injury 7, spastic paralysis 6, brain tumor 5, multiple sclerosis 5, TCE 3.
76 patients (48.71%) were under treatment with anticoagulants/antiplatelet. Of these, 63 with antiplatelet (clopidogrel: 33. AAS: 25, triflusal 15) and 13 with anticoagulants (Warfarin: 5, Apixaban 3, Dabigatran 2, LMWH 2 and Ribaroxaban 1). All of the 5 patients on warfarin therapy had an INR of 2-3. Cause for antiplatelet/anticoagulation: prophylaxis of stroke 63, atrial fibrillation 8, and DVT 2.
No anticoagulant and/or antiplatelet therapy was withdrawn prior to infiltration. No significant bleeding complications have been recorded.

Discussion

Conclusion

Among the patients who were infiltrated, many were being treated with antiplatelet and/or anticoagulants. According to different studies, the possibility of significant bleeding is small.

But general recommendations are important, inform the patient about the potential risk of bleeding, factors that may increase the risk, use of less invasive needles, use of ultrasound guidance, application of pressure after infiltration and surveillance of the infiltration site.

References

Abstract: 119 - Date: 2019-06-29 10:30:23am

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Topic of Summary

Advances in PRM diagnostics

Title of Summary

Ultrasonography of salivary glands in primary Sjogren's syndrome

Keywords

salivary gland, ultrasonography, Sjogren's syndrome

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Introduction

To analysis ultrasonography (US) changes of salivary glands (SG) in patients with primary Sjogren's syndrome (pSS) and association US findings with symptoms of dryness, disease activity and biopsy of minor salivary glands (MSG).

Materials & Methods

This study included 205 pSS patients (mean age 53.9±11.5, disease duration 5.6 years) and 87 healthy controls (mean age 52.3±14.7). The disease activity was evaluated by EULAR SS disease activity index (ESSDAI). Parotid and submandibular salivary glands were assessed by US. Statistical analyses were performed using SPSS, Version 19.0.

Results

Xerophthalmia and xerostomia were presented in 185/205 (90.2%) and 186/205 (91.2%), respectively. The majority of pSS patients 88/205 (43%) had moderate disease activity. Biopsy of MSG was positive in 140/172 (81.4%) pSS patients. US abnormalities were established in 197 (96%) pSS patients and in 16 (18%) controls ($p<0.0001$). Pathological sizes of SG were more frequently in pSS patients than controls, 111 (54.2%) vs. 3 (3.4%) patients, respectively ($p<0.0001$). The echogenicity of the SG was pathological in 142 (69.3%) pSS patients and in 5 (5.7%) control group ($p<0.0001$). Most of pSS patients had pathological inhomogeneity, 197/205 (96.1%) vs. 16/85 (18.4%) in control group ($p<0.0001$).

After adjustment for potential confounders variables, dry mouth, ESSDAI and biopsy of MSG were significantly associated with advanced US changes of SG ($p < 0.05$).

Discussion

Conclusion

Our findings confirm that most of established pSS patients had pathological US features. Degree of xerostomia, objective disease activity and biopsy of MSG had predictive value for advanced US change of salivary glands. \r\n \r\n

References

Abstract: 122 - Date: 2019-06-29 12:48:53pm

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Topic of Summary

Advances in PRM diagnostics

Title of Summary

THE IMPORTANCE OF COLOR DUPLEX SCAN (CDS) OF THE SUPRA-AORTIC BRANCHES IN THE EARLY DETECTION OF CEREBROVASCULAR OCCLUSIVE DISEASE OF CAROTID ARTERIES AND IN STROKE PREVENTION

Keywords

Stroke, color duplex scan

Authors

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Introduction

To show the importance of preventive CDS examination of carotid arteries through the analysis of performed examinations during a 5- year period in early detection of cerebrovascular occlusive disease of the carotid arteries and also in prevention of stroke.

Materials & Methods

Retrospective cross section study that was carried out in Specialized Rehabilitation Hospital, Banja Koviljaca from 2014-2019. The research material was electronic database of patients. 595 examinees were observed. Four groups of patients according to the level of stenosis: I- stenosis up to 20 %, II ranging from 20-40%, III ranging from 40-75% and IV group- over 75%.

Results

During a 5 – year period 595 CDS examinations of supra-aortic branches were performed. The positive results were found at 47.9% patients. Among those patients 73.6 % of them were required to go on yearly follow-up (stenosis from 20 to 40%), 14.03% patients needed assessment in 6 months (stenosis from 40-75%) and for 12.28% of examinees the operative treatment was recommended (stenosis more than 75%). The clinical findings of the other 52.1% examinees were diagnosed with finding of no clinical importance (normal result or stenosis up to 20%).

Discussion

Conclusion

The high percentages of results that required patients to do a yearly follow up confirmed the importance of CDS in early detection of cerebrovascular occlusive disease of carotid arteries. The reliability of this diagnostic procedure in detecting severe degrees of stenosis and in

recommending timely operative treatment has confirmed its importance in the prevention of stroke.\r\n\r\n

References

Abstract: 126 - Date: 2019-06-29 15:37:56pm

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Topic of Summary

Cardiovascular and pulmonary prevention and rehabilitation

Title of Summary

Anatomical assessment of muscle mass by ultrasound in patients with heart failure who attend a cardiac rehabilitation program

Keywords

muscle, ultrasound, heart failure, rehabilitation

Authors

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Introduction

Sarcopenia is defined as age-related muscle wasting, but it has also been observed in several diseases, including heart failure (HF).\r\nObjectives:\r\n-Assess changes in muscle mass of patients with heart failure in a cardiac rehabilitation program (CRP) by ultrasound.\r\n-Define changes in muscle strength in quadriceps by dynamometer and changes in functional capacity through oxygen consumption measured in ergospirometry\r\n

Materials & Methods

Quasi-experimental study before and after in patients with stable heart failure, grade II-III of NYHA who attend a CRP.\r\nVariables: age, sex, HF type , transverse measurement by ultrasound of the anterior rectus section and internal vastus (AR+IV), maximum oxygen consumption before and after, and specific strength in quadriceps by isometric exploration with a dynamometer before and after. Analysis: SPSS version19.0

Results

Total patients:12 (66,6% males, 33,3% females). Average age: 57,5 years. Type of HF:75% dilated, 22,22% ischemia and 8% valvulopathy.\r\nMeasurement of AR+IV before-after: right leg 33,95 vs 36,7mm and left leg 34,16 vs 37,92mm. The maximum oxygen consumption at the beginning was 21,38 ml/min/kg, and decreased to 13,97 at the end.\r\nMeasure of strength in quadriceps, in kg, before-after: right leg 38,16 vs 44,34 and left leg, 36,3 vs 40,87.

Discussion

Conclusion

Carrying out a cardiac rehabilitation program you get an improvement in muscle mass and strength. The functional capacity measured by the oxygen consumption decreases in our study, in the possible relation to the small sample size

References

Abstract: 128 - Date: 2019-06-29 16:08:25pm

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

Catastrophizing in patients with knee osteoarthritis in physical medicine and rehabilitation

Keywords

catastrophizing; knee osteoarthritis

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Introduction

: Pain is among the most frequently reported, bothersome, and disabling symptoms described by patients with knee osteoarthritis. Furthermore, catastrophizing, a set of negative emotional and cognitive processes, is increasingly implicated in the experience of pain in osteoarthritis (OA).
The aim of this study was to analyze the correlations between severity of Knee OA and catastrophizing.

Materials & Methods

A cross-sectional study was conducted in patients with knee OA referred to the PMR department of Mahdia in March 2019. Socio demographic data, history of knee osteoarthritis as well as radiographic data were collected. The severity of t Knee OA was assessed using Lequesne Index. Pain catastrophizing was measured by the Pain Catastrophizing Scale (PCS).

Results

Results: Forty patients were included. The mean age was 57.3 ± 9.1 years and the sex ratio 0.11. Most patients (66.7%) were referred from general practitioners. The mean evolution of the OA was 3.5 years. The mean Lequesne index was 10.8 ± 2.33 and the mean PCS was 26.93 ± 6.5 . No associations were found between the PCS and the Lequesne index ($p = 0.3$, $r = 0.1$) or between Lequesne score and the radiographic stage ($p = 0.39$).

Discussion

Conclusion

PCS was high among patients with knee OA followed in rehabilitation. A correlation between catastrophism and severity wasn't established in our study.

References

Abstract: 135 - Date: 2019-06-29 17:28:34pm

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

Radial shock wave therapy in talalgia related to plantar fasciitis

Keywords

talalgia-Radial shock wave therapy-pain

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Introduction

To evaluate the short- and medium-term efficacy of radial extracorporeal shock wave therapy (RESW) in plantar fasciitis (PF), using clinical and functional parameters

Materials & Methods

This is a prospective study conducted over a 12-month period. Included patients with AP adhered to RESW therapy. Short- and medium-term follow-up (6-12 weeks) was done for pain by pain EVA and for function by disability EVA, walking speed and by FAAM

Results

We included 42 patients. The mean age was 40.2 ± 8.8 years [28-56 years] with a female predominance (66.7%). The attack was bilateral in 50% of cases. At the 6 and 12 week assessment, the pain EVA dropped from 7.75 to 4.4 and to 3 respectively. Functionally we observed a significant decrease in functional gene (walking perimeter, walking speed and FAAM score)

Discussion

Conclusion

RESW therapy can be used in the treatment of PF for its positive effects in the short and medium term. Nevertheless, other randomized studies would be necessary, following a standardized program and studying the interest of this therapy in the long term.

References

Abstract: 145 - Date: 2019-06-29 20:25:23pm

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Topic of Summary

PRM in paediatric problems

Title of Summary

Management and functional outcome of neonatal brachial plexus palsy in a Tunisian population

Keywords

neonatal brachial plexus pulsy, Mallet, Gilbert-Raimondi

Authors

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Affiliations

CHU Taher Sfar Mahdia; Sahloul hospital Sousse

Introduction

The aim of this study was to describe the management and functional outcome of Neonatal Brachial Plexus Palsy (NBPP) in a Tunisian population.

Materials & Methods

We conducted a retrospective cohort study of children diagnosed with NBPP followed at the physical medicine and rehabilitation (PMR) department in Taher Sfar hospital of Mahdia, Tunisia between 2005 and 2014. Self-reported demographics, delivery history, management procedures and functional evolution were recorded. Throughout the follow-up, the functional recovery at the shoulder and at the elbow were assessed respectively by the Mallet score and the Gilbert-Raimondi scale.

Results

We recruited in our study 77 patients with 80 NBPP. Their mean age was 7.7 ± 3.6 years and the mean age at the first consultation in PMR was 15 ± 28 days. Functional rehabilitation was followed by 98.8% of the patients and it was regular during the first two years in 66.3% of the cases. Thirty five percent of the patients underwent surgery: 18.8% tendon transfer, 6.2% nerve surgery and 10% derotation osteotomy. At last check, a good functional recovery at the shoulder (Mallet score \geq III) was noted in 70% of the cases. The Gilbert-Raimondi scale showed a good recovery (scale = III) in 65% of the NBPP. The functional outcome wasn't correlated with the gender ($p = 0.05$) nor the other delivery history parameters.

Discussion

Conclusion

The functional outcomes of affected infants with NBPP in our population showed good recovery. It required multidisciplinary management including functional rehabilitation and surgical measures.

References

none

Abstract: 146 - Date: 2019-06-29 20:34:21pm

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Topic of Summary

Pain management in PRM

Title of Summary

Pain associated factors in Tunisian Post-polio patients

Keywords

pain-post polio syndrome

Authors

Migaou Houda; El Fani Nadra; Boudokhane Soumaya; Nouili Tasnim; Jellad Anis; Ben Salah Farih Zohra

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Introduction

The purpose of our study was to assess pain and identify its associated factors in patients with post-polio syndrome (PPS).

Materials & Methods

This is a descriptive study involving all PPS patients, followed at the Physical Medicine and Rehabilitation department of the Monastir University Hospital. \r\nOur patients were evaluated using the Visual Analog Scale (VAS) to measure pain intensity, the Multidimensional Fatigue Inventory (MFI-20) and the Borg RPE scale, the functional capacity by the six minutes walk test (6MWT) and psychological disorders with the Hospital Anxiety and Depression scale HAD.\r\n\r\n

Results

We collected 45 patients in our study, the average age was 52.4 years [± 7.5].\r\nThe sex ratio was 0.7 (female predominance), the most common symptoms were fatigue and muscle and joint pain. \r\nThe average pain VAS was 4.4 ± 1.9 . The intensity of the pain was greater in the unaffected limb than in the limb reached (4.7 vs 4.3).\r\nMost of our population (40%) had moderate pain. Pain considered very intense (pain EVA ≥ 7) in 8 patients.\r\nThe intensity of pain was positively correlated with general fatigue and reduced motivation of the MFI-20 items, fatigue assessed by the Borg RPE scale, and HAD-D and HAD-A scores.\r\nWe found also a statistically significant and negative correlation between pain intensity and the 6MWT.\r\n\r\n

Discussion

Conclusion

The findings indicate that pain is a persistent and common problem in persons with PPS, highlighting the need for effective and accessible pain treatments for this population.

References

Abstract: 147 - Date: 2019-06-29 20:41:01pm

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

Epidemiological profile of the Post –Polio-Syndrome in Tunisian rehabilitation

Keywords

post -polio syndrome - epidemiological

Authors

Migaou Houda; El Fani Nadra; Boudokhane Soumaya; Nouili Tasnim;Jellad Anis;Ben Salah Frih Zohra.

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Physical Medicine and Rehabilitation Department, University Hospital of Monastir, Tunisia.

Introduction

The aim of this study was to highlight the epidemiological characteristics of post-polio-syndrome (PPS) and to identify the associated factors.

Materials & Methods

This is a descriptive study involving all PPS patients followed at the Physical Medicine and Rehabilitation department of the Monastir University Hospital. The data analyzed were epidemiological and clinical characteristics.

Results

Forty five patients were included in this study, the average age was 52.4 ± 7.5 years with a female predominance (sex ratio 0.7). Ten patients (22.2%) were from rural areas and 35 patients (77.8%) were from urban environments. The majority of our patients had office work (44.4 %). The mean age of acute poliomyelitis was 25.3 [4-72]. The majority of our patients (86.7%) were married, and the average BMI was 28.7 ± 6.5 . We found that the most frequent reason for consultation was orthotic turnover in 12 patients (26.7%) followed by unequal length of the lower limbs in 11 patients (24.4%). The majority of our patients had monoplegic involvement (77.8%). The most common symptoms were fatigue and muscle and joint pain. Sixty six percent of our patients benefited from functional rehabilitation sessions related to the symptoms of PPS. Thirty-two patients (71.1%) had assistive devices and the majority had walking braces: 19 patients (59.4%).

Discussion

Conclusion

The SPP is a pathology less recognized by practitioners in Tunisia, yet it affects a relatively young population and still active on a professional level with a particular social and medical profile.

References

Abstract: 150 - Date: 2019-06-29 20:57:42pm

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

Descriptive cross-sectional epidemiological survey on podiatry disorders in a population of 100 teachers in primary schools

Keywords

podiatry disorders; teachers

Authors

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Introduction

To describe the frequency of podologic disorders among teachers in the school.

Materials & Methods

Our study is descriptive, cross-sectional on teachers from 4 primary schools in the city of Kasserine having been practicing profession during 2017 and 2018. Podiatry disorders were investigated by clinical evaluation and examination with podoscope.

Results

One hundred teachers were assessed with a mean age of 48 years and a sex ratio of 0.44. Ankle and foot pain were noted in 48% and 17% of cases, respectively. Foot pain was dominated by talalgia (20%), plantalgia (16%) and metatarsalgia (12%). The clinical examination showed lower extremity varicose veins in 18 teachers and lower extremity edema in 13 teachers. Calluses were noted in 31 teachers; their most frequent locations were the heel (66%), regarding M5 (22%) and M1 (15%). Foot tendonitis were diagnosed in 12 teachers (5 cases of Achilles tendonitis, 2 cases of long fibular tendonitis, 3 cases of posterior tibial tendonitis and 2 teachers had a plantar fasciitis). Podoscope examination revealed 12 cases of flat foot, 8 cases of hollow foot, and 4 cases of varus of the hindfoot.

Discussion

Conclusion

This study allowed to better understand the effects of orthostatism on the appearance of podalgia, especially among teachers hence the interest of foot safety in the workplace. A prevention strategy for musculoskeletal disorders should be developed not only for teachers but for all occupations requiring prolonged periods in a standing position.

References

Abstract: 152 - Date: 2019-06-29 22:00:19pm

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Topic of Summary

Pain management in PRM

Title of Summary

Evaluation of pain for mothers of children with cerebral palsy

Keywords

Authors

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Introduction

The purpose of this work is to Describe the clinical and socio-demographic profile and to evaluate the intensity and the impact of pain for these mothers.

Materials & Methods

This is a prospective descriptive study conducted during the period between January and May 2019 that included mothers of children with CP followed by outpatient visits. The pain and its impact were evaluated by the Brief Pain Inventory.

Results

Thirty-six mothers were included in the study with an average age of 36 years. They were married in 92% of cases with modest monthly income in 64% of cases. The majority of mothers were housewives (72%) with a primary school level of 34% of cases. The number of children was 1 in 25% and 2 in 33% of families. Chronic pain lasting longer than 3 months was reported in 33 women (92%). They were frequent, daily and once a day in 39% and 34% of cases respectively. The predominant localization of pain was the spine (80%): lumbar (78%) and cervical (36%). In addition, 56% and 48% of mothers had lower and upper limb pain respectively. The pain intensity was 6/10 according to the score of Brief Pain Inventory with a significant impact on general activity, work, sleep and mood.

Discussion

Conclusion

Pain for mothers of children with CP is very often under diagnosed. The evaluation of pain and appropriate management should be systematic because of their significant impact on the quality of life of these mothers.

References

Abstract: 154 - Date: 2019-06-29 22:17:38pm

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Topic of Summary

PRM in paediatric problems

Title of Summary

Pain for children with cerebral palsy

Keywords

Authors

S.Mtaouaa; E.Toulgui; O.Borgi. R.Moncer; S.Jemni; F.Khachnaoui

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Introduction

The objective of this work is to describe the clinical and socio-demographic profile, and to evaluate the intensity of pain for children with CP.

Materials & Methods

Prospective and descriptive study, including 36 children with CP, followed by outpatient visits, over a period of 5 months, from January to May 2019. The data collection was done by pre-established cards. The intensity of the pain was evaluated by the Brief Pain Inventory.

Results

A total of 36 children were enrolled in this study with an average age of 6 years with extremes ranging from 3 to 14 years. The predominant topographic involvement was quadriplegia for 20 patients with spasticity for 33 patients. The rank of children in the family was the first in 56% of cases. Seventy-seven percent of the children were from urban areas, and 64% had a modest socio-economic level. Pain lasting longer than 3 months was present for all patients. this pain was daily for 39% of children. The most common location of pain was the lower extremity: hip (75%), knee (86%) and foot (86%). Upper limb and spine were less frequent and objectified in 64% and 28% of cases respectively. The intensity of the pain was between a minimum of 3 and a maximum of 9 with an average of 6/10 according to the Brief Pain Inventory.

Discussion

Conclusion

Children with cerebral palsy frequently experience pain, mainly joint pain. The assessment of pain should be systematic because of its high prevalence and its significant impact on quality of life.

References

Abstract: 156 - Date: 2019-06-29 22:35:27pm

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Topic of Summary

Orthotics and prosthesis in PRM

Title of Summary

Foot orthoses for Equinus deformity for hemiplegic patients: Functional results

Keywords

Equinus ; Foot orthoses; hemiplegic

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Introduction

\r\nThe aim of our work is to describe functional results after Foot orthoses and rehabilitation in hemiplegic patients with Equinus deformity of the foot.

Materials & Methods

It is a retrospective study of 30 hemiplegics with paralysis of the levers, collected in the department of physical medicine and rehabilitation of Ibn Rochd University Hospital of Casablanca, over one year. The epidemiological data, clinical and quality of walking after orthosis equipment of muscle levers are evaluated by the functional ambulation classification (FAC).

Results

The mean age was 60 years (37 to 83 years), 25 male, 20 ischemic stroke and 10 hemorrhagic stroke. Voluntary control at the level of the foot levers was: 0/5 in 20 patients, 1 / 5 patients in other 10 patients. All patients benefited from an orthoses of muscle levers and the walk was done at the admission with an English cane.\r\nWalk after rehabilitation: 60% of patients walk without help 26% walk with help AND 13% do not work.

Discussion

Conclusion

the use of the levers orthoses finds its place to improve the walking pattern and bring more autonomy and stability.

References

Abstract: 160 - Date: 2019-06-29 22:48:01pm

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Topic of Summary

Robotics, virtual reality and innovatives techniques in PRM

Title of Summary

The effect of Virtual Reality Rehabilitation on Postural Control in patients with Total Knee Replacement.

Keywords

Virtual Reality, Postural control, Total knee replacement

Authors

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Introduction

The efficacy of Virtual- Reality-Rehabilitation (VRR) on motor skills improvement in patients with Total Knee Replacement (TKR) was recently showed, compared to traditional therapy. This study aims to assess the effects of VRR on postural control in TKR patients.

Materials & Methods

20 subjects were enrolled within 10 days after unilateral TKR and conducted 15 sessions (5 times/week; 45 minutes) of: postural control and proprioceptive exercises if assigned to Control Group-CG (10 subjects; 70.8±4.02 y.o.); or VRR standing on a balance board and receiving a real-time visual bio-feedback in serious video games with VRRS if in Virtual Realty Group-VRG (10 subjects; 68.5±9.37y.o.). Clinical assessments and computerized posturography (Open Eyes – OE; Closed Eyes – CE; Kistler force platform; 30 s; 100 Hz) were performed at baseline (T1) and the end of treatment (T2). Wilcoxon's test was used ($p < 0.05$).

Results

Statistically significant pre-post improvements was found in all clinical tests. Between-group difference was significant in TUG only. The COP measures showed significant pre-post variations of AP range OE and COP area OE in VRG only. Between-group variations were found in AP range OE, COP length OE, Mean VCOP OE. No significant differences were found in CE condition.

Discussion

Conclusion

Results suggested that VRR, as well as conventional therapy, improves clinical outcomes,. Significant between-group difference in TUG performance, in favour of VRG could be due to a better gain of static and dynamic balance in these subjects. Significant inter-group differences in a subset of COP measures, revealed by computerized posturography, indicate further analysis of COP signal on larger samples.

References

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Abstract: 162 - Date: 2019-06-29 23:02:46pm

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Topic of Summary

PRM in paediatric problems

Title of Summary

Urodynamic profile of vesicosphincteric disorders for children

Keywords

Authors

E.Toulgui, S.Mtaoua, R.Moncer, G.Hamdi, W.Ouaness, S.Jemni, F.Khachnaoui

Affiliations

Physical department; Sahloul hospital; Sousse; Tunisia

Introduction

The aim of this work is to describe the urodynamic profile of vesicosphincteric disorders in children.

Materials & Methods

This is a prospective and descriptive study spanning four years (2013 to 2017), focusing on children referred to Physical Medicine and Rehabilitation Department in Sahloul University Hospital for a urodynamic assessment. The data collection was done by operating records established for this work and the statistical analysis was performed by the SPSS 22.0 software

Results

A total of 81 children were included in this study with an average age of 10 years and extremes of 4 to 17 years and a female predominance with a sex ratio of 0.47. Metering was performed in 73 patients (90%) who had demonstrated a dysuric curve in 55% of cases with a significant post-micturition residue in 32% of cases. At cystomanometry, a hypersensitive bladder was found in 56% of cases, an unstable bladder in 49% of children, a reduced bladder capacity in 52% of cases and a hypo compliant bladder in 57%. Profilometry was performed for 52 children (64%) and showed sphincter insufficiency for 10 patients and

sphincter hypertonicity for only 4 patients. The urodynamic assessment, the latter was normal in 33% of the cases and objectified a central overactive bladder and an immature bladder in respectively 36% and 19% of the cases.

Discussion

Conclusion

The urodynamic examination allows to define the type of bladder dysfunction and the vesicosphincteric balance. This has a prognostic value for guiding therapy and monitoring patients.

References

Abstract: 164 - Date: 2019-06-29 23:11:28pm

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

The impact of functional disability to fatigue in patients with rheumatoid arthritis

Keywords

functional disability, fatigue, rheumatoid arthritis

Authors

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Introduction

The aim of this study was to estimate impact of functional disability to fatigue in patients with RA.

Materials & Methods

A perspective study included 109 patients with random sample method for patients treated in in Niška Banja Institute. The average age of patients was 58.86 ± 9.54 and the average disease duration was 10.74 ± 7.43 godine. Functional disability is represented with HAQ questionnaire filled in by patients themselves. Fatigue was measured by questionnaires for fatigue evaluation: Fatigue Facit Scala (FFS) and Visual Analog Scale Of Fatigue (VAS F) . Comparison of numerical variables classified according to the type of normality was performed by ANOVA test. Statistic significance was at the level of < 0.05 .

Results

Average value of FFS, in patients with total functional disability was 13.02 ± 5.65 , than patients with more severe disability 21.01 ± 7.62 , ($p < 0.001$) and patients with moderate functional disability 32.29 ± 7.27 , ($p < 0.001$). FFS was statistically significantly better in patients with moderate functional disability than patients with more severe disability ($p < 0.001$)
Average value fatigue by estimated VAS F, in patients with total functional disability was 75.38 ± 13.26 , that was statistically more significantly worse than patients with more severe disability 65.42 ± 18.59 , ($p < 0.001$) and patients that had moderate functional disability 40.23 ± 18.87 .

Discussion

Conclusion

Our results have confirmed the hypothesis that functional disability has adverse impact on fatigue. Fatigue is not included in the disease activity core set measures and indices in RA.

References

Abstract: 173 - Date: 2019-06-30 07:53:41am

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Topic of Summary

PRM in paediatric problems

Title of Summary

Paediatric's Low Back Pain

Keywords

paediatric low back pain; children and adolescents; prevention; management.

Authors

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Introduction

Recently we have noticed a growing awareness of low back pain (LBP) in children and adolescents. With a prevalence rate up to 58% per year and an equally gender distributed, LBP is more common between 13 and 15 years. Associated risk factors are related to lifestyle, physical, school and psychosocial aspects. The etiology of LBP in children and adolescents differs significantly from that of adults. Although most causes of back pain in children are benign, there are serious conditions that must not be missed.
AIM: To review paediatric LBP's management to prevent LBP in adults.

Materials & Methods

Bibliographic research in databases Pubmed and Medline. Inclusion criteria: 1) meta-analyses, systematic reviews and reviews; 2) language: Portuguese, English and Spanish; 3) in humans; 4) last 10 years.

Results

Trivelyan and Legg found that 13.9% of 245 children and adolescents had LBP and 98% of these complained some kind of disability, most commonly difficulty carrying their school bags. Pellise et al found that 9/10 adolescents can be considered healthy, while 10% can be a symptom of a multidimensional health problem. There is a wide differential that should be considered. Regular exercise and education appear to reduce LBP episodes in children aged 8 to 11 years. Preventive treatments cover postural hygiene content, the practice of physical therapy exercises and the promotion of physical activity.

Discussion

Conclusion

Serious pathology needs to be excluded. The combination of therapeutic physical conditioning and manual therapy is the most effective for paediatric LBP. Preventing LBP in children may prevent adult incidence.

References

Abstract: 177 - Date: 2019-06-30 09:30:01am

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Topic of Summary

PRM in paediatric problems

Title of Summary

Clinical and urodynamic profile in elderly

Keywords

geriatric, bladder disorder, urodynamic

Authors

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Introduction

To determine the clinical profile and evaluate the urodynamic examination data of elderly subjects with vesico-sphincteric disorders.

Materials & Methods

A retrospective study of patients aged more than 65 years old who consulted for micturition disorder between January 2015 and December 2016

Results

We counted 80 patients (8 men and 72 women) with a mean age of 69.67 +/- 4.8 years. 21.2% of the patients were diabetic and 14.3% of the men were followed for a prostate disease. The most frequent symptom was urinary tract leakage in 48.5% of cases, prolapse in 43.8%, and repetitive urinary tract infections in 7.7% of cases. Flowmeter revealed dysuria in 21.2% of cases. Cystomanometry had objectified a hypocompliant bladder, hypersensitive in 50% of cases and a hyposensitive bladder in 3.1% of cases. Sphincteric insufficiency was present in profilometry in 24.2% of cases. The therapeutic modalities considered were perineal reeducation in 25% of cases, treatment with anti cholinergic drugs in 40.6% of cases, baclofen and alpha blockers in 15.1% of cases.

Discussion

Conclusion

The management of urinary incontinence in the elderly should be comprehensive. The challenge is to identify the causes of incontinence specific to aging as well as co-morbidities and environmental factors. An interrogation then a clinical and urodynamic examination make it possible to determine the origin and to define at best the type of urinary incontinence.

References

Abstract: 178 - Date: 2019-06-30 09:33:16am

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Topic of Summary

PRM in paediatric problems

Title of Summary

Relationship between obesity and low back pain in childhood: A Descriptive cross-sectional study

Keywords

Low back pain; children; BMI; Obesity; risk factors

Authors

Moncer Rihab¹; Mtawaa Sahb¹; Bouenba M. Amin¹; Toulgui Emna¹; Herchi Wafa²; Ouannes Walid¹; Frigui Sinen¹; Jemni Sonia¹; Khachnaoui Faycel¹

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Introduction

The purpose of our work, is to determine the relationship between weight and low back pain juveniles.

Materials & Methods

This is a descriptive cross-sectional study of 444 students, 201 boys and 243 girls, with a mean age of 14.95 years. The assessment includes an interrogation, an anthropometric evaluation, the examination of the spine, the extensibility of the pelvic muscles and the endurance of the muscles of the spine and quadriceps.
The weight profile was determined on corpulence curves of French references, on which were added the 2 curves of international obesity task force "IOTF 25 and 30".

Results

The prevalence was 22.3% CI (95% confidence interval): [18.2 - 26.2]. This prevalence increases with age with a clear predominance of women. The mean age of onset of symptomatology was 13.45 years.
The prevalence of low back pain in overweight or obese children was 38.7% and 19.63% in the rest of the children. The difference is significant. Overweight students are 2.58 times more likely to develop low back pain.

Discussion

Conclusion

Common low back pain in children is common but still unknown which obesity is a risk factor. The knowledge of these risk factors makes it possible to take them into account in the management and prevention of low back pain.

References

spine examination, statics

Abstract: 182 - Date: 2019-06-30 10:08:49am

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Topic of Summary

Pain management in PRM

Title of Summary

DIFFERENCES IN FUNCTIONALITY BETWEEN PATIENTS WITH LOW BACK PAIN, WIDESPREAD PAIN, AND FIBROMYALGIA

Keywords

Authors

Aleksandar Knezevic; Snezana Tomasevic-Todorovic; Ksenija Boskovic; Tijana Spasojevic; Svetlana Kevic, Milica Jeremic Knezevic

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Introduction

It is well known that chronic pain impairs functionality. The purpose of this study was to investigate whether there is a difference in functionality level between patients with chronic low back pain, widespread pain, and fibromyalgia.

Materials & Methods

This cross-sectional study included 127 patients (average age $53,39 \pm 15,26$ years, 84 women (66,1%)) who were divided in three groups: group 1, with low back pain and sciatica ($n=59$, 46,5%); group 2, with widespread pain ($n=32$, 25,2%); group 3, with fibromyalgia ($n=36$, 28,3%). Subjects filled out the battery of questionnaires: average pain intensity in the last four weeks on the Numerical Rating Scale (NRS), the Central Sensitization Inventory (CSI), the Fear-avoidance Components Scale (FACS). The functionality of the patients was estimated by the Oswestry disability index (ODI).

Results

Pain intensity on NRS was significantly higher in groups 2 and 3 (5,95 vs 6,78 vs 6,94, $\chi^2=8,829$, $p=0,012$). The similar findings were found for CSI score (33,44 vs 40,19 vs 50,53, $\chi^2=31,874$, $p<0,001$). On the other hand, FACS score (60,53 vs 60,16 vs 61,75, $\chi^2=0,093$, $p<0,955$) and ODI (38,31 vs 36,03 vs 41,61, $\chi^2=1,457$, $p=0,483$) did not differ significantly among groups.

Discussion

Conclusion

Although patients who suffer from widespread pain and fibromyalgia had significantly higher pain intensity and CSI scores compared to patients with low back pain and sciatica, they did not perceive lower functionality or higher fear avoidance in the tested sample. It seems that pain intensity does not necessarily compromise functionality in patients with chronic pain.

References

Abstract: 184 - Date: 2019-06-30 11:05:33am

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Topic of Summary

Pain management in PRM

Title of Summary

DIFFERENCES IN PERCEIVED SOCIAL SUPPORT AMONG PATIENTS WITH CHRONIC PAIN AND HEALTHY CONTROLS

Keywords

Authors

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Introduction

Social factors might play a role in development of chronic pain, however papers on this topic are scarce and the association is vague. The purpose of this study was to investigate differences in perceived social support between patients with chronic low back pain and healthy controls.

Materials & Methods

This cross-sectional study included 100 patients (healthy controls – Group I: n=41 (average age 48,68±11,53 years, 28 women (68,3%)) and chronic low back pain patients – Group II: (average age 49,56±14,46 years, 33 women (55,9%)), who filled out the Multidimensional Scale of Perceived Social Support (MSPSS) which encompasses three dimensions: significant other (SO) support, family (FA) support, and friend (FR) support.

Results

There was no differences in age and gender between groups ($t=-0,323$, $p=0,747$; $\chi^2=1,554$, $p=0,297$). Perceived FA support ($6,67\pm0,56$ vs $6,17\pm1,26$, $t=2,715$, $p=0,008$) and total MSPSS scores ($6,41\pm0,52$ vs $6,06\pm1,09$, $t=2,136$, $p=0,035$) were significantly higher in group I, while perceived SO ($6,37\pm1,01$ vs $6,15\pm1,36$, $t=0,855$, $p=0,395$), FR ($6,18\pm0,80$ vs $5,85\pm1,16$, $t=1,620$, $p=0,094$) support, were not different among groups.

Discussion

Conclusion

Perceived family social support played an important role in differentiating subjects with chronic low back pain and healthy controls in our sample. It seems that this dimension of social support is more impaired than other in chronic low back pain patients. Further research on a larger sample, with other types of chronic pain is needed.

References

Abstract: 186 - Date: 2019-06-30 11:34:56am

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

EVALUATION OF THE MEDIUM-TERM EFFECTIVENESS OF INTRA-ARTICULAR ULTRASOUND-GUIDED VISCOSUPPLEMENTATION WITH HYALURONIC ACID (iHA) COMBINED WITH INTRA-ARTICULAR PULSED RADIOFREQUENCY (iPRF) IN PATIENTS WITH CHRONIC HIP OSTEOARTHRITIS

Keywords

intra-articular pulsed radiofrequency, intra-articular ultrasound guided viscosupplementation with hyaluronic acid, chronic hip osteoarthritis

Authors

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Introduction

The aim of this study is to compare the efficacy and safety of intra-articular ultrasound guided viscosupplementation with hyaluronic acid (iAH) versus iAH combined with intra-articular pulsed radiofrequency (iHA + iPRF) to reduce levels of pain, stiffness and disability in patients with chronic hip osteoarthritis.

Materials & Methods

Our prospective randomized 6-month follow-up case and control trial included 20 patients who received iHA and 20 patients who underwent iHA plus iPRF 50-60 V for 10 minutes. Inclusion criteria: Nontraumatic mechanical hip joint pain for more than 6 months, Kellgren II-III radiological degrees. Exclusion criteria: neurological or rheumatic disease, intellectual deficit, fractures or surgical interventions previous in the affected extremity. The primary end points was the visual analog scale and the WOMAC Pain, Rigidity and Disability Questionnaire . All outcome assessments were performed at baseline and at 6 months.

Results

Pain relief and functional improvement were observed in both groups ($p < 0.03$). However stiffness improvement was observed only in the control group. There were no significant differences between the two groups.

Discussion

Conclusion

Adding iPRF to the iHA infiltration technique does not seem to provide greater improvement in pain, stiffness or functional deficit in patients with symptomatic chronic hip osteoarthritis in the medium term . A higher number of patients in future HA studies would serve to clarify this point.

References

Abstract: 187 - Date: 2019-06-30 11:35:23am

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Topic of Summary

Pain management in PRM

Title of Summary

Chronic pain after total knee arthroplasty: Prevalence, predictors and consequences

Keywords

Chronic pain; Total Knee Arthroplasty; Surgery; Rehabilitation

Authors

André Canelas (1); Paulo Araújo (1); Raquel Fonseca (2); Bernardo Ferreira (1); Simão Serrano (1); Lisete Luís (1); Filipa Januário (1); Mafalda Bártolo (1)

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Introduction

Evaluate the prevalence of chronic pain 3-months and 1-year after total knee arthroplasty (TKA), as well as its predictors and consequences.

Materials & Methods

Longitudinal prospective study, including patients with moderate-to-severe osteoarthritis submitted to TKA between 10/2016 and 10/2017. All patients performed a rehabilitation protocol with 15 sessions of physiotherapy. A clinical evaluation, therapeutically measures adopted, numerical pain rating scale (NPRS) and Short Form Health Survey (SF-36) were assessed before and 2-days, 3-months and 1-year after the surgery. Several socio-demographic variables and the Hospital Anxiety and Depression Scale (HADS) were evaluated before the surgery.

Results

72 patients included, 61% female, mean age 71 years ($i \pm 6.4$). Prevalence of chronic pain (NPRS ≥ 3 ,^{3,4} with $i \geq 3$ -months) was 33% at 3-months and 30% at 1-year. 19% had been followed at Pain Unit. 2-days after surgery 41% had a NPRS ≥ 3 ,^{3,4} and it was associated with chronic pain ($p < 0.001$). Higher NPRS before the surgery predicted chronic pain at 1-year

($p=0.001$). Initial lower SF-36 subscale scores were associated with worst SF-36 scores at 1-year ($p<0.001$). The female sex ($p<0.001$) and initial higher anxiety levels ($p=0.03$) predicted higher NPRS at 3-months and 1-year. Age, body mass index, depression and chronic venous insufficiency were not associated with chronic pain. Chronic pain was associated with lower scores at all SF-36 subscales at 1-year ($p<0.001$).

Discussion

Conclusion

Chronic pain is a frequent complication of TKA with great impairment at quality of life. A more carefully evaluation and treatment of acute pain is necessary in order to avoid its chronification, particularly in these prone patients.

References

Abstract: 188 - Date: 2019-06-30 11:41:46am

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

The real results of total knee arthroplasty in moderate-to-severe osteoarthritis: a 1-year longitudinal prospective study

Keywords

Total Knee Arthroplasty; Osteoarthritis; Function; Surgery; Rehabilitation;

Authors

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Introduction

Evaluate the long-term outcome and prognostic factors in total knee arthroplasty (TKA) for moderate-to-severe osteoarthritis concerning symptoms, functionality and quality of life (QoL).

Materials & Methods

Longitudinal prospective study, including patients with moderate-to-severe osteoarthritis submitted to TKA between 10/2016 and 10/2017. All patients performed a rehabilitation protocol with 15 sessions of physiotherapy. The numerical pain rating scale (NPRS), Knee injury and Osteoarthritis Outcome Score (KOOS4) and Short Form Health Survey (SF-36) were evaluated before surgery, 3-months and 1-year after the surgery. Several socio-demographic variables and the Hospital Anxiety and Depression Scale (HADS) were evaluated before the surgery. The walking ability, the satisfaction with the intervention (Likert scale) and complications were determined 3-months and 1-year after procedure.

Results

72 patients included, 61% female, mean age 71 years ($\bar{x} \pm 6.4$). There was a 3-month and 1-year significant improvement in NPRS ($p < 0.001$), in all KOOS4 subscales ($p < 0.001$) and in SF-36 domains: physical functioning; role limitations due to physical health; social functioning, pain (all $p < 0.001$); emotional well-being and energy/fatigue ($p < 0.05$). 20% patients were not satisfied with the results and 16% would not accept the same intervention at 1-year follow-up. Prevalence of chronic pain (NPRS ≥ 3) was 33% and 30% at 3-months and 1-year. 3% were submitted to a new surgery. 84% had walking capacity without aids at 1-year. The lowest satisfaction rates were in patients with chronic pain ($p < 0.001$).

Discussion

Conclusion

TKA followed by a specific rehabilitation program significantly improves symptoms, functionality and QoL. Chronic pain is a major concern and can explain the low satisfaction rates.

References

Abstract: 189 - Date: 2019-06-30 11:58:21am

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Topic of Summary

Neurorehabilitation, spasticity

Title of Summary

Association between Metabolic Syndrome and Barthel Index after Acute Stroke

Keywords

metabolic syndrome, MetS, stroke, Barthel index

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Introduction

Metabolic syndrome is a collection of metabolic disorders: abdominal obesity, hyperglycemia, dyslipidemia and hypertension type 2 DM that increases the risk of the cardiovascular diseases. The aim of the study was to determine the effects of the MetS on the short-term prognosis of patients with acute ischaemic stroke.

Materials & Methods

This retrospective study enrolled 270 patients after acute ischaemic stroke hospitalized at Clinic for Physical Medicine and Rehabilitation, Clinical Center University of Sarajevo in period of one-year. Patients were divided in two groups: with MetS (n=170) and non-MetS (n=100). Neuromotor functions and functional independence were assessed with Barthel index (BI) at start and discharge.

Results

Out of 170 patients in MetS group, 94/170 were females and 76/170 were males. Out of 100 patients in non MetS group, 54/100 were females and 46/100 were males. The mean of age in MetS group was 69.1 ± 5.6 years, in non-MetS group was 69.8 ± 11.1 years ($p > 0.05$). In MetS group, the most common risk factors were: hypertension, smoking history, dislipidaemia, obesitas, and T2 DM - In the MetS group, the median of BI at discharge was significantly higher, compared with BI at start. In the non-MetS group, the median of BI at discharge was significantly higher compared with BI at start. There was not significantly difference between these two groups ($z = -0.550$, $p > 0.05$).

Discussion

Conclusion

There are no significant difference in progress between MetS and Barthel index in patients after acute ischaemic stroke.

References

It has been shown that a good rehabilitation program is required after a stroke without entering into the input factors

Abstract: 192 - Date: 2019-06-30 12:28:47pm

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Topic of Summary

PRM in geriatric conditions

Title of Summary

Rehabilitation in hospital-associated deconditioning in older adults

Keywords

deconditioning, functional decline, rehabilitation

Authors

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Introduction

To define the benefits of rehabilitation treatment in geriatric patients with hospital-associated deconditioning and describe the factors that can influence functional outcomes.

Materials & Methods

Observational and descriptive study on elderly patients with hospital-associated deconditioning, assessed for one year at the Rehabilitation Department in a geriatric hospital. 92 patients over 70 years of age were collected. Medical and social variables, Barthel index and mobility at admission and at discharge, rehabilitation treatment carried out and destination at hospitalary discharge were analyzed. Data were analyzed using the SPSS 19 statistical package.

Results

The average age was 83 + 5 years. 40% received the treatment in the Mid-term Stay Unit. The in-patient period lasted 33 + 24 days and the rehabilitation treatment period lasted 16 + 19 days. 21% of them developed confusional syndrome during in-patient period. The confusional syndrome is fact is related to worse Barthel score at discharge ($p=0.028$). 65% of patients admitted to Mild-term Stay Unit are discharged using a walker for gait. Only 1% of them do not get gait ability, compared to patients not admitted in Mild-term Stay Unit, which are 22% those who do not get gait ($p=0.044$). 61% of patients return home at discharge.

Discussion

Conclusion

Age does not influence outcomes after rehabilitation treatment. Performing the treatment at Mild-term Stay Unit allows to obtain better functionality at discharge. Confusion syndrome during admission is associated with worse outcomes at discharge.

References

Abstract: 194 - Date: 2019-06-30 12:50:46pm

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Topic of Summary

PRM in paediatric problems

Title of Summary

Effects of itinerant occupational therapy service in after school day service for children with disabilities

Keywords

after school day service, developmental disorder

Authors

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Introduction

Saitama prefectural association of occupational therapists is conducting an itinerant occupational therapy service project intended for after school day service for children with disabilities. The first author joined this project and visited to one after school day service 13 times from August 2017 to March 2018. Day service staff was provided indirect support by occupational therapist. There is a few evidence for the effects of itinerant service. The purpose of this study was to retrospectively evaluate the effects of itinerant occupational therapy.

Materials & Methods

Qualitative inductive analyses were performed on clinical records of the first author. The first and second author divided the data into categories. The day service administrator checked the strengths and difficulties questionnaire (SDQ) of seven children at the fifth and 13th session. We conducted Wilcoxon signed-rank test for comparison.

Results

The occupational therapist gave the staff advices about "sensory motor condition", "mental condition", "social skill education", "human environment" and "material environment". There were no significant differences in SDQ total and subscale.

Discussion

Conclusion

The findings of this study suggest that occupational therapist gave various advice to the staff.
We can't clarify the effects

References

Abstract: 199 - Date: 2019-06-30 15:15:06pm

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Topic of Summary

PRM in paediatric problems

Title of Summary

BODY POSTURE ANALYSIS OF PRESCHOOL CHILDREN IN SABAC IN 2013 AND 2018
comparison and general evaluation

Keywords

posture, analysis, preschool, Sabac

Authors

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Introduction

Evaluating the state of body posture in preschool children, comparing prevalence in two groups from 2013 and 2018. Study the significance of any differences, define the most common disorders

Materials & Methods

The intersectional approach was used; results of clinical examinations of posture were reviewed according to ten categories. There were 223 participants in 2013 and 360 in 2018; 583 altogether. The methods used were descriptive statistics and the Chi square and Fisher test. Significant difference was calculated at $p < 0.05$.

Results

The proportion of children from 2013 with the following disorders is higher: rib cage deformity 16.59%:3.33% $\chi^2 = 29.75$; scapular fixation 56.5%:24.4%, $\chi^2 = 43.26$; kyphosis 29.60%:13.3%, $\chi^2 = 23.15$; lumbar hyperlordosis: 19.28% : 14.72%, $\chi^2 = 30.06$; foot deformity: 45.29%:20.83%, $\chi^2 = 39.93$ (df = 1, p = 0.00 for all), scoliosis $p = 0.00$.
In 2018 57.78% children had completely normal test results and 39.46% of children in 2013 $\chi^2 = 17.76$, df = 1, p = 0.00. No statistically significant difference could be established for the other categories. The whole percentage of real scoliosis was low, the Adams forward bend positive results were found in 0.69% and general scoliotic posture in 1.72%.

Discussion

Conclusion

Significant statistical differences in the two groups of children were found in 6 out of the 10 posture categories; all in favour of the group from 2018 in terms of better test results. The whole number of structural deformities is very low, while almost the half of all participants had completely normal posture test results. Further monitoring and treatment were prescribed according to the test result.

References

Abstract: 201 - Date: 2019-06-30 15:15:45pm

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

Is Vitamin C useful for prevention in the appearance of complex regional pain syndrome

Keywords

Vitamine C, complex regional pain syndrome, wrist fracture, ankle fracture

Authors

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(1) Physical Medicine & Rehabilitation Dr; Hospital Universitario Nuestra Señora de La Candelaria, Spain.

Introduction

To assess the efficacy of the use of vitamin C as a preventive method in the appearance of complex regional pain syndrome (CRPS)

Materials & Methods

Prospective observational randomized study in recruitment period from January 2018 to December 2018 collecting patients diagnosed with fracture of ankle and wrist treated conservatively, which were divided randomly into four groups according to the kind of fracture and the contribution or not of vitamin C: (1000mg / day for 50 days). Periodic reviews were made at the first, third and sixth months, with bone scintigraphy being requested in the latter.

For the statistical study we used SPSS 20.0 with descriptive analysis for each variable and t-student for intergroup variables or intragroups with level of significance $p < 0.05$.

Results

We included 115 patients with an average age of 64.45 and distribution of fractures (81 wrists and 34 ankles). We found 11 cases of CRPS stage I in patients who did not take vitamin C (10 wrists and 1 ankle) and only 1 case in those who took it (1 wrist) demonstrated both clinically and gammagraphically, these data being statistically significant ($p < 0.001$) in wrist fractures and not significant in the ankle ($p = 0.01$).

Discussion

Conclusion

The use of vitamin C as a preventive method in the formation of CRPS is useful in patients with wrist fractures, not finding significant evidence in other kinds of fractures, although studies with a greater number of patients should be done to validate these results

References

Abstract: 203 - Date: 2019-06-30 15:21:16pm

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Topic of Summary

Neurorehabilitation, spasticity

Title of Summary

Disorder of Attention after Traumatic Brain Injury in Pediatric Population

Keywords

Authors

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Introduction

Traumatic brain injury (TBI) is a heterogeneous disorder with frequently diffuse axonal injury. A variety of cognitive dysfunctions are frequently found, such as disorders of attention. Nonetheless, problems are found regarding definition, conceptualization, evaluation and treatment approach of attention disorders. These issues are even more prominent in the pediatric age, regarding the specificities of this population.

Materials & Methods

We present a retrospective descriptive study where we revised all traumatic brain injured patients who were admitted in the pediatric rehabilitation unit of a specialized rehabilitation center between 2015 and 2019.

Results

Of the 24 hospitalized patients, in 16 of them it was possible to perform neuropsychological evaluation. Attention disorder was suggested in all of them. Besides the changes in attention, the results of the evaluation were also suggestive of executive and processing speed dysfunction as common cognitive deficits. All these patients were treated with methylphenidate and they were integrated into a cognitive stimulation program using computerized software (Rehacom® and Cogniplus®). Globally, all patients had a positive evolution. This was objectified by the progress in the software program and in neuropsychologic formal re-evaluation.

Discussion

Conclusion

With this study, the authors intend to describe the protocol of evaluation, intervention and re-evaluation, showing the reality of our pediatric inpatient rehabilitation unit.

References

Abstract: 208 - Date: 2019-06-30 15:36:03pm

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Topic of Summary

Pain management in PRM

Title of Summary

Pain management at the end of life: experience of a Tunisian intensive care unit.

Keywords

Pain-end of life

Authors

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Medical Intensive Care Unit (MICU) of Sahloul University Hospital of Sousse, Tunisia.

Introduction

The objective of our the present study was to report our local experience in end of life care, and highlight the importance of pain management in a global approach of the terminally ill patients.

Materials & Methods

We conducted a monocentric retrospective study, including 12 patients who had been hospitalized in the Medical Intensive Care Unit (MICU) of a Tunisian university hospital. We included patients who required palliative care and for whom a do not resuscitate order (DNR) was issued upon admission or within 48 hours of hospitalization.

Results

Average age was 73 ± 13 years. Palliative care was sustained until death by optimizing the respiratory state and systemic perfusion pressure. Regarding pain management, in addition to the postural treatment that contributed to the comfort of the patient, medical analgesic treatment was essential for 7 patients; Morphine was prescribed in 3 patients, paracetamol (Perfalgan®) was prescribed intravenously for 2 patients, and orally for 1 patient. Nefopam (Acupan®) was prescribed to 1 patient. Body hygiene, prevention of bed sores, deep venous thrombosis, and gastrointestinal bleeding were ensured for all patients. Spiritual needs were satisfied.

Discussion

Conclusion

Pain relief was a major concern during end of life care, and was ensured for all patients with efficacy. \r\nThe goal of palliative care is to relieve physical pain and other symptoms, but also to take into account psychological, social and spiritual suffering

References

Abstract: 209 - Date: 2019-06-30 16:58:06pm

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Topic of Summary

Neurorehabilitation, spasticity

Title of Summary

Predicting functional recovery after ischemic stroke in adults

Keywords

functional recovery; ischemic stroke; prognosis

Authors

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Introduction

In the twelve hours to seven days after stroke, many patients experience moderate but steady neurologic improvements(1). Our aim is to review the evidence of prediction of functional recovery after stroke.

Materials & Methods

We searched PubMed, Medline and Cochrane Library for articles with the key words “stroke”, “prognosis”, “functional recovery” or respective MESH terms.

Results

Early active finger extension, grasp release and shoulder movement are associated with a favorable recovery at six months(2,3,4,5). First voluntary movements appear between 6-33 days in hemiplegic patients(6), with a peak function recovery within three and nine weeks by 80% and 95% of patients, respectively(7). Patients who maintain sitting balance for 30 seconds and perform muscle contraction in the paretic leg within the first 72 hours have a 98% probability for independent ambulation at six months(8). Maximal language recovery of mild, moderate and severe aphasia can occur in 2, 6 and 10 weeks, respectively(9). Dysphagia improves over time(10), although nearly 6% of patients may need feeding tubes(11). Of these, “â...” removes it before discharge and almost all were discontinued by one year. Sensory impairment is common(12) but currently there are no reliable predictors of recovery. Limited data suggests full recovery from visuospatial neglect within 3 months(13,14) and that 17% of those with complete homonymous hemianopia (HH) and 72% with partial HH had full recovery at 1 month(15).

Discussion

Conclusion

The time course and degree of improvement vary for specific deficits. Knowing which factors influence the prognosis is crucial for its prediction and for defining the best approach to our patients.

References

Abstract: 210 - Date: 2019-06-30 17:10:08pm

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

Does the Montenegrin healing mud is a powerful tool in the balneological treatment of inflammatory rheumatoid diseases

Keywords

healing mud, balneology, rheumatoid diseases

Authors

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Introduction

was to investigate the sustained effect of healing mud and hydro-aroma therapy on hematological parameters in a sample of patients suffering from inflammatory diseases.

Materials & Methods

The study included 22 Norwegian patients with confirmed diagnosis of inflammatory rheumatoid diseases recruited by the Section for Climate Therapy, Oslo University Hospital, Norway and sent to 4 weeks physical treatment and rehabilitation to the Institute „Dr Simo Milosevic“ Igalo, Montenegro in August and September 2018. They were divided into 2 groups: (1) treated with biological drugs (BD; n=10) and (2) treated with other DMDs (non-BD; n=12). All the patients received standardized protocol based on natural healing mud and hydro-aroma therapy (mineral Whirlpool bath enriched with essential oils of Lavender, Orange and Lemon). All patients had a clinical examination and sampled blood before and after finishing treatment.

Results

Our results indicated that applied protocol significantly increased mean platelet count (PLTs) ($p < 0.031$) in the whole sample of patients. Further analyses point that BL patients had significantly decreased mean monocytes (Mo) count ($p < 0.036$) and non-BL patients had significantly reduced mean white blood count (WBC) ($p < 0.029$).

Discussion

Conclusion

Obtained results indicate existence of a significant anti-inflammatory potential of Montenegrin healing mud in the treatment of chronic inflammation as a powerful toll in balneology.

References

Abstract: 213 - Date: 2019-06-30 17:46:21pm

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Topic of Summary

Cardiovascular and pulmonary prevention and rehabilitation

Title of Summary

Cardiac Rehabilitation in Patients with EXCOR Ventricular Assist Device in a Central Hospital in Spain

Keywords

Cardiac Rehabilitation, Ventricular Assist Devices

Authors

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Introduction

Ventricular assist device(VAD) has rapidly emerged as a durable and safe therapy for end-stage heart failure patients. Though originally conceived for bridge-to-transplant indication, significant advancements in medical management and newer generation devices have improved patient outcomes, leading to increasing use as destination therapy. The burden of adverse events remains significant and defines the most pressing issue in the current state of VAD therapy. Cardiac Rehabilitation (CRHB) seems to have an important role in the management of this patients, nevertheless these programs are being implemented in few places around the world. In our hospital since 2015 the CRHB team, in close cooperation with all health professionals involved in the management of this patients, has been implementing a rehabilitation program based in the current evidence. We describe this program from implantation, care in the ICU. extraction fase and ending of the process for which it was first implanted.

Materials & Methods

ICU post-surgery protocol: avoid musculoskeletal and respiratory complications by performing a passive and active assistance kinesitherapy and respiratory physiotherapy. Third day post-surgery: transfers and bipedestation. Wing: functional independence, ambulation, stationary bicycle (50-60 rpm), treadmill (2km/h) with MHR= RHR+30 bpm. Ambulatory: improve exercise tolerance, increase exertion capacity and prevent complications adding aerobic exercise and muscle strengthening.

Results

There has been a change of scenario from bedridden cachectic patients in the ICU awaiting heart transplantation, and post-ICU syndrome, to active patients with EXCOR.

Discussion

Conclusion

They're able to perform CRHB programs, which decreases complications and hospital readmissions, allowing them to arrive to transplantation in the best possible physical condition.

References

Nothing to declare.

Abstract: 214 - Date: 2019-06-30 17:49:38pm

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Topic of Summary

PRM in paediatric problems

Title of Summary

Cardiac Rehabilitation in Pediatric Patients with Congenital Heart Defects

Keywords

Pediatric Cardiac Rehabilitation, Congenital Heart Defects

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Introduction

Congenital heart defects (CHD) are defined as structural abnormalities of the heart and/or large intrathoracic vessels and present with repercussion on cardiovascular system functioning. These are the most common malformations, with a worldwide prevalence of 2.1 to 12.3 cases per 1000 newborns. Improved surgical techniques and medical treatment increased the number of patients surviving to adulthood. With this work we intend to carry out a literature review regarding cardiac rehabilitation programs (CRP) aimed for children with CHD and its results.

Materials & Methods

A literature review between the years of 2000 and 2018 was carried out, using PubMed/MEDLINE and ClinicalKey - FirstConsult, and the MESH words: \"cardiac rehabilitation\", \"pediatric\" and \"congenital heart defects\".

Results

CRP for children with CHD should intervene in cardiovascular risk factors, psychological, nutritional and social variables (involving the child and the caregivers) and a exercise training program that has to take into account the age of the child, specificities of each CHD, possible surgical corrections and medical treatment. The majority of children with CHD end up stratified as medium-high risk.

Discussion

Conclusion

There are very few studies in this population, but most show that CRP increase exercise tolerance, survival and quality of life thanks to adaptative changes at rest, increased cardiopulmonary capacity and ventilatory efficiency. There aren't many pediatric cardiac rehabilitation centers in the world, and most base their work on CRP of the adult

population. It's necessary to study specific rehabilitation programs for this population increasing research in this field, so that we can provide them the best possible health care.

References

Nothing to declare.

Abstract: 217 - Date: 2019-06-30 18:10:02pm

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Topic of Summary

Pain management in PRM

Title of Summary

Piriformis syndrome: when conservative treatment fails

Keywords

Piriformis; Pain; Ultrasound; Botulinum toxin

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Introduction

The piriformis syndrome (PS) is a poorly characterised painful condition attributed to dysfunction of piriformis muscle, causing buttock pain of somatic and neuropathic origin. In refractory cases, validated alternative approaches to conservative treatment are lacking. The aim of this work is to highlight a possible role of the interventional ultrasound-guided techniques integrated in a multimodal therapy in the refractory PS.

Materials & Methods

36-year-old female diagnosed with PS, following a 2-year history of right buttock pain. Scaling of multimodal oral pharmacological treatment was unsatisfactory. High intensity pain scores and disability were reported in both Numeric Pain Rating Scale (NPRS) and Brief Pain Inventory (BPI) consecutive assessments.

Results

An ultrasound-guided intervention test was carried out with 2ml lidocaine 2%, 2ml ropivacaine 0.2% and 0.5 ml methylprednisolone (40mg/ml). Enrolment in a complementary rehabilitation program was assured. Despite total resolution of pain, it resumed after 24 hours. A similar trial conducted with 100U of incobotulinum toxin A (BoNT-A) resulted in a prolonged reduction of pain and improvement at 4-week pain inventory scores, namely pain intensity

(9.25 to 6.0) , interference in general activity (8.67 to 7.0), affective dimension (6.0 to 5.0) and global pain interference (7.71 to 6.14).

Discussion

Conclusion

PS is a debilitating chronic pain condition with physical, pharmacological and surgical treatment methodologies. BoNT-A ultrasound-guided injection technique can be a valuable alternative as part of a multimodal approach in PS. This case suggests superior results over steroid injections in respect to both intensity and duration of pain relief.

References

Abstract: 218 - Date: 2019-06-30 19:12:35pm

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Topic of Summary

PRM in paediatric problems

Title of Summary

Spine deformities and mineral bone density in children with cerebral palsy

Keywords

cerebral palsy, children, mineral bone density, spinal deformities

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Introduction

In children with cerebral palsy (CP) spine deformities are frequent. Mobility and muscular load are reduced, which is the main reason for reduced bone mass. \r\nAim of this paper was to determine the ratio of spine deformities and mineral bone density in children with CP.\r\n

Materials & Methods

The sample included 41 patients, aged 5-18, who were followed at Institute for Children and Youth Health Care of Vojvodina in Novi Sad during one year. DXA examination was

performed at Special Hospital for Rheumatic Diseases, Novi Sad. The bone mineral density (BMD as well as the BMD Z-score) were determined for the lumbar region of the spine.

Results

The average age of the participant was just under 11 years. The most common types of cerebral palsy were quadriplegia (58.5%) and diplegia (26.8%). Most patients had V level of functionality by GMFCS scale (43.9%), then IV level (26.8%) and I level (17.1%). Deformities of the spine were present in 70.7% of the patients. There were no statistically significant differences in BMD Z-score of the lumbar spine compared to the presence of spine deformities. BMD Z-score of the lumbar spine was statistically significantly lower at V compared to I level by GMFCS scale ($p < 0.01$).

Discussion

Conclusion

Children with spine deformities did not have significant decrease BMD Z-score of the lumbar spine related to the presence of deformities of the spine. There was significant difference between I and V level by GMFCS.

References

Study supported by Grant No III41012, Ministry of education, science and technological development of Serbia.

Abstract: 224 - Date: 2019-06-30 20:21:00pm

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

A one-year experience in the rehabilitation of unicondylar prostheses on the knee

Keywords

unicondylar knee arthroplasty, early rehabilitation, UKA

Authors

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Introduction

Osteonecrosis or degenerative osteoarthritis is common disease of knee with an increase in human life. Replacement of only one compartment of the knee with unicondylar knee prosthesis replacement is applied after strict patient selection, in order to improve the quality of life. Partially replacing the damaged knee sections with unicondylar knee arthroplasty UKA is a minimal invasive surgery, replacing only the damaged part of the knee.

Materials & Methods

A retrospective study of patients operated at the orthopedics and traumatology department at in the current year.

Results

The study included a total of 26 patients that experienced preoperative evaluation and preparation for surgery with a minimally invasive Knee Medial Parapatellar Approach. For the evaluation of pain quality, a VAS (visual analogue scale) scale was used postoperatively, data from the surgical protocol and HIS of the orthopedics department for hospital days spent at our institution, and different scales for the quality and speed of recovery and inclusion of patients in daily activities.

Discussion

Conclusion

All 26 examinees with conducted early rehabilitation were dismissed on the third day of the intervention with early mobilization, verticalisation. The benefits are faster recovery and decreased postoperative pain, lower surgical incision, lower blood loss, preservation of the ligament knee apparatus, better volume of the knee movement, subjective feeling as a natural knee. Cost of hospital days has decreased, shorter hospital treatment, post-operative complications. And with this, it is also expected to reduce the need for revision of prostheses.

References

Abstract: 225 - Date: 2019-06-30 20:21:10pm

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Topic of Summary

PRM in geriatric conditions

Title of Summary

Sarcopenia among hospitalized older adults: epidemiology and risk factors identification

Keywords

sarcopenia, handgrip strength, muscle mass, gait speed, muscle insufficiency, EWGSOP, EWGSOP2

Authors

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Introduction

Define sarcopenia prevalence according to European Working Group Sarcopenia Older People (EWGSOP) criteria among hospitalized Portuguese older adults and its association with nutritional and mental status, co-morbidities, polymedication and quality of life (QoL).

Materials & Methods

A cross-sectional study, approved by Ethical Committee, was conducted at an Internal Medicine unit for a 4-month period (Feb-May 2019). Patients ≥ 65 years were included; exclusion criteria: < 65 years old, non-cooperation and decompensated diseases. Muscle strength (MS) evaluated by handgrip strength with JAMAR dynamometer; muscle quantity (MM) evaluated through appendicular skeletal muscle mass (ASM) predicted by bioelectrical impedance analysis (BIA) and body size adjusted (ASM/height²); physical performance (PP) evaluated from 4-m usual walking speed test. Mini Nutritional Assessment (MNA), mini-mental state and SarQoL were applied. All subjects signed informed consent. Statistic analysis performed using SPSS24.0.

Results

A total of 50 patients, median age of 82 years. According EWGSOP2 (2019) criteria: 50% had no sarcopenia, 32% probable, 6% confirmed and 12% severe sarcopenia. Applying EWGSOP 2010 criteria 28% had no sarcopenia, 13% pre-sarcopenia, 25% sarcopenia e 34% severe sarcopenia. Confirmed risk factors: undernutrition (OR=3). Some co-morbidities and polymedication identified as possible association. Male gender identified as possible protector factor. It wasn't possible to confirm QoL and sarcopenia association ($p > 0,05$).

Discussion

Conclusion

Current criteria are more specific and less sensitive, however about 50% had some sarcopenia degree. Focus on low MS as key characteristic raises important questions: MM role and definition as muscle insufficiency. Confirmation of undernutrition as a risk factor and a potential therapeutic target. Larger samples are needed

References

Abstract: 226 - Date: 2019-06-30 20:27:21pm

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Topic of Summary

Sports injury rehabilitation

Title of Summary

Isokinetic profile of strengths trunk: Moroccan experience

Keywords

Isokinetic measurement, extension, flexion, trunk muscle strength

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Introduction

This study had a first objective of developing an isokinetic strength profile for trunk's flexors and extensors among normal subjects, through our experience.

Materials & Methods

Fourteen subjects (five males and nine females) with sedentary to light physical activity levels and without low back pain were recruited. Measurements of isokinetic parameters during trunk flexion and extension were studied. Subjects performed extension and flexion contractions at 60° and 120°/sec starting at neutral position to 70° flexion. Data interpretation consisted of flexion and extension peak torques at 60°/sec and total work performed and torque ratios at 60°/sec and 120°/sec.

Results

Peak torque value in trunk extension, at 60°/sec angular velocity, was significantly higher in males but not in flexors muscles. Trunk total work for both flexion and extension in males was significantly higher than in females at 60°/sec and at 120°/sec. There was no difference between two groups regarding flexors to extensors ratios at any angular velocity.

Discussion**Conclusion**

it is relevant to establish a sound database in order to establish normative values, to guide the interpretation of the results of an applied isokinetic evaluation at the spine. However, the assessment of the flexor and extensor muscles of the spine requires rigor in the installation of the subject.

References

Abstract: 230 - Date: 2019-06-30 20:42:41pm

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Topic of Summary

Neurorehabilitation, spasticity

Title of Summary

Bone fractures and stroke – are they intertwined?

Keywords

stroke, bone fracture, etiology, risk

Authors

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Introduction

Stroke patients are at higher risk of bone fractures. Simultaneously, a cerebrovascular event occurs frequently after a hip fracture. As these two entities share common risk factors, knowing the pathogenesis linking both could help defining preventive and therapeutic strategies. The aim of this paper is to review the evidence underlying fractures and stroke.

Materials & Methods

Narrative literature review of papers published in the database Pubmed/Medline/Embase/Cochrane Library, searching MESH terms: stroke AND bone fracture AND etiology AND risk.

Results

About 5% of stroke patients suffer a bone fracture. Muscle atrophy and the resulting immobility of hemiparetic limbs increase the risk of falling, which in the course of a bone-demineralization process (hemi-osteoporosis) results in bone fracture. The advanced age, prestroke dependency, loss of balance, neglect, perceptual and visual deficits are all correlated to fractures. Additionally, stroke leads to dementia, presenting in 50% of fall-related hip fractures. A fall occurs 14-65% during hospitalization after stroke, with persistent higher risk on later stages of the disease, mainly on transition stages. Finally, it is described that after a bone fracture, the systemic production of inflammatory cytokines enhances ischemic stroke and cognitive dysfunction.

Discussion

Conclusion

Fractures and stroke are intertwined as one increases the risk of the other. Epidemiological data is heterogeneous, due to lack of patients' clinical and functional standardization. However it is well described that stroke is an independent risk factor for fractures. Its prompt identification by patients and health professionals is the first step to develop prevention and therapeutic guidelines.

References

Abstract: 231 - Date: 2019-06-30 20:43:53pm

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

Relationship between quality of life, isokinetic strength and functional performance in patients with knee osteoarthritis

Keywords

osteoarthritis, strength, quality of life, functional

Authors

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Introduction

The aim of the study was to verify the correlations between quality of life, isokinetic knee muscles strength and functional performance in patients with knee osteoarthritis.

Materials & Methods

34 patients (15 men and 19 women) with moderate knee osteoarthritis (grade 2 and 3 according to Kellgren-Lawrence classification) were included in this cross-sectional, observational study. Quality of life assessment was based on the SF-36 Questionnaire. Isokinetic quadriceps and hamstrings torque was assessed using a Gymnax Iso 1 dynamometer at the angular velocities of 60°/s and 120°/s. Functional performance was assessed using the stair-climbing test (SCT), the timed up-and-go test (TUG) and the 6-minute walk test (6MWT).

Results

Functional performance assessed by all the three tests was found to be significantly correlated ($p < 0.05$) with extensor strength for both velocities. 6MWT also significantly

correlated ($p < 0.05$) with flexor strength. Quality of life, assessed by SF-36, was significantly correlated ($p < 0.05$) with knee extensor strength, SCT, TUG and 6MWT.

Discussion

Conclusion

Muscle strength and functional performance have been found to be important predictors for quality of life in people with knee osteoarthritis. Therefore, they should be addressed particularly by comprehensive personalized rehabilitation programs in this population.

References

Abstract: 234 - Date: 2019-06-30 21:01:58pm

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Topic of Summary

Pain management in PRM

Title of Summary

PHYSICAL MODALITIES IN TREATMENT OF PAIN IN PATIENTS WITH PERIPHERAL NERVE DAMAGE

Keywords

pain, physical therapy, peripheral nerve damage

Authors

Boskovic K; Tomasevic-Todorovic S; Knezevic A; Milasinovic Lj; Ivacic J; Spasojevic T.

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Introduction

The aim of this study was to evaluate the efficacy of various physical modalities in eliminating pain in patients with peripheral nerve damage.

Materials & Methods

Our research was involved 56 patients with peripheral nerve damage, the study group consisted of 30 patients and control group of 26 patients which were age and sex matched. Patients in the study group received different physical modality therapy, while control group subjects had the electrophoresis of benfotiamine applied. Patients were tested at the

beginning and at the end of the treatment and following tests have been used: Visual analog scale (VAS), PainDETECT test, Neuropathic Pain 4 Questions (DN4).

Results

In our research, we found that there were significant differences between all of the data obtained at the beginning and end of the study, both in the study and in the control group. Patients in the study group reported better effect in reducing the intensity of pain based on data acquired by Pain detect test.

Discussion

Conclusion

The results show that after different physical therapy modalities, as well as after application of electrophoresis of benfotiamine, there was a significant decrease in the intensity of pain in patients with peripheral nerve damage.

References

physical therapy is a significant part of a multimodal approach to the treatment of neuropathic pain.

Abstract: 236 - Date: 2019-06-30 21:06:18pm

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Topic of Summary

Orthotics and prosthesis in PRM

Title of Summary

Clinical Outcomes of Lower Limb Amputees: PM&R as a Case Study

Keywords

Amputation, Amputee, Lower Limb, Rehabilitation

Authors

Susana Rosa; Ana Almeida Pereira; Mariana Castro Martins; Rui Pedro Santos; Teresa Plancha Silva

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Introduction

To present the experience of a PMR Service in lower limb amputees patients; to evaluate the influence of amputation etiology and the prosthesis prescription and delivery process on the outcome of these patients.

Materials & Methods

A study of amputees of the lower limb assisted in 2017 was performed on the Amputee Consultation of a PMR Service. Epidemiological data were defined.

Results

207 patients were observed, 164 males and 43 females, with ages between 28 and 94 years old. Transtibial and transfemoral amputations were observed in 140 cases, amputation of the fingers and foot occurred in 58 patients. Trauma was observed in 94 cases, the vascular cause was responsible for 91 amputations. In patients less than 60 years old, trauma was the most frequent etiology; in older patients, vascular cause was the most frequent cause of amputation. 15 patients reported phantom pain and 18 phantom sensation. Only 82 amputees received the prescribed prosthesis, and the mean waiting time for delivery was 16 months.

Discussion

Conclusion

The majority of the patients observed were male, mainly between 60 and 69 years old. The most frequent levels of amputation were transtibial and transfemoral. Trauma was responsible for most amputations, especially in younger patients. Phantom pain or sensation were reported by more than 20% of amputees. The mean waiting time for the acquisition of the prosthesis was long, with most patients awaiting reception. These facts may affect both the physical and mental integrity of patients, as well as the effectiveness of a rehabilitation program.

References

Abstract: 239 - Date: 2019-06-30 21:15:16pm

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Topic of Summary

Neurorehabilitation, spasticity

Title of Summary

Effect of Age on Functional Outcomes After Stroke Rehabilitation

Keywords

Rehabilitation, Aging, Stroke, Outcome, Disability evaluation

Authors

Susana Rosa; César Magro; Diogo Ribeiro Martins; Jorge Rodrigues; Maria Fátima Carvalho; Sílvia Boaventura; Teresa Plancha Silva

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Introduction

The incidence of stroke and the demand for stroke rehabilitation services continues to increase. It is important to identify the impact of age on functional outcome of these patients.

Materials & Methods

This retrospective study includes all patients admitted to an inpatient stroke rehabilitation program for 1 year in a Portuguese rehabilitation Hospital in 2018, comparing two age groups (<65 and ≥65 years old). Functional status at admission and discharge was evaluated by means of the FIM instrument and Barthel index (BI).

Results

The mean age was 66 years. The <65 years old group had 30 (47.6%) patients and the ≥65 years old group 33 (52.4%). The main cause of stroke was ischemia. The lesions were mostly located in the left hemisphere. The mean length of hospital stay was 45,6 days. FIM presented a mean of 72,7 points (<65= 74,6 and ≥65= 71) at admission and 88,9 (<65= 90,8 and ≥65= 87,2) at discharge. The FIM variation presented a mean of 16,2 points (both <65 and ≥65= 16,2). BI presented averages of 49,8 and 71 points, on admission and discharge, respectively. There was no statistically significant relationship between age at the time of the accident and the variation of the FIM and BI.

Discussion

Conclusion

There was a predominance of male individuals with ≥65 years old at the date of the accident. No statistically significant relationship between age and functional outcomes suggests that there is no justification to deny patients access to rehabilitation solely because of advanced age.

References

Abstract: 245 - Date: 2019-06-30 21:30:54pm

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Topic of Summary

PRM in geriatric conditions

Title of Summary

Management in fall prevention workshop in elderly people faller in physical rehabilitation medicine

Keywords

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Introduction

To study the interest of a multidisciplinary consultation in fall prevention workshop and the rehabilitation treatment in the prevention of falls in elderly people

Materials & Methods

Retrospective study of 28 patients treated in fall prevention workshop. All patients had an initial assessment including an interview, a clinical examination and a functional assessment. These patients were treated in a fall prevention workshop at the rate of two sessions per week for 6 weeks. At the end of the workshop these patients had a final evaluation to judge the effectiveness of the rehabilitation

Results

The average age is 68 years. The antecedents include hypertension in 67% of patients, visual disturbances in 53% of cases and diabetes in 53% of patients. There is a history of falling during the last 6 months in 78% of patients. Three patients use a walking technique. The average MIF is 117/126. The average score of Tinetti is 17/22. The average time of the get up and go Test is 15.2 seconds. After the rehabilitation treatment, we note an improvement of the test of Tinetti and timed get up and go test which passed respectively to 15,5/22 and 12,3 seconds. The difference was statistically significant. The score of the get up and go test is passed from -2 to -1.8 with a non-significant difference

Discussion

Conclusion

It is possible to reduce the risk of falling and therefore reduce the risk of fracture. To this end, the various measures to prevent osteoporosis and falls. Hence the interest of generalizing the consultation and the fall prevention workshop to the front-line structures

References

Abstract: 257 - Date: 2019-06-30 22:14:10pm

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Topic of Summary

Special body function problems e.g. spasticity, urinary system, sexuality, dysphagia, speech disorders and others

Title of Summary

Urinary Incontinence in Sports – When you sneeze, you lose?

Keywords

Authors

José Bissaia Barreto; Pedro Teixeira; Vítor Costa Pereira; Joana Silva; Sofia Toste; Inês Táboas; Catarina Aguiar Branco

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Introduction

We aimed to review the current literature on the particularities of urinary incontinence (UI) on athletes and its optimal management.

Materials & Methods

We searched Medline database, via PubMed, using the keywords “urinary incontinence”, “sports”, “pelvic floor exercise” and “rehabilitation” and selecting articles from 2000 onward.

Results

There is a higher prevalence of UI in athletes (particularly in women) comparing with general population (3x), with high variability of incidence between sports. UI is associated with a negative impact on quality of life (QoL) and on sport performance, leading some to switch or give up sports. Although physical activity (PA) may benefit UI by lowering body mass index and intrabdominal pressure, intense PA can exacerbate complaints and increase the prevalence of UI. In fact, athletes have weaker pelvic floor muscles (PFM) than non-athletes as demonstrated by a lower perineal pressure and this may be due to PFM fatigue after strenuous exercise or an imbalance between intra-abdominal pressure and contraction of PFM. Regarding treatment and/or prevention, PFM strengthening increases perineal resting pressure and maximum voluntary contraction, thus improving UI severity. Despite a lack of consensus on the optimal protocol, PFM strengthening should be recommended as first line strategy.

Discussion

Conclusion

UI is highly prevalent amongst women athletes. Still, many don't report their symptoms even when it negatively impacts QoL and performance. Therefore, it's important that athletes, coaches and caregivers are aware of this and seek medical counselling when needed. Likewise, physicians should actively ask for urinary complaints, provide information and adequate treatment options.

References

Abstract: 259 - Date: 2019-06-30 22:15:30pm

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Topic of Summary

Sports injury rehabilitation

Title of Summary

ISOKINETIC PROFILE OF THE KNEE OF MOROCAN AMATEUR FOOTBALLERS

Keywords

Isokinetic, knee, footballers, amateurs

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Introduction

To evaluate the strength of the knee flexors and extensors of amateur footballers as well as the level of strength according to the position occupied in the field

Materials & Methods

Cross-sectional study including thirty-five (35) Moroccan amateur footballers occupying different positions. These players were evaluated on isokinetic dynamometer "Cybex Norm". The protocol used was bilateral. The isokinetic muscle strength of the quadriceps and hamstrings in the concentric mode was measured at 2 angular velocities: 60 ° / s and 180 ° / s. The parameters studied were peak force, labor and hamstring hamstring ratio (IJ / Q).

Results

The mean age was 25.28 ± 3.34 . There was no statistically significant difference in the isokinetic strength of the stents and flexors of footballers between the dominant and non-dominant knees in the two speeds. However, the strength of the non-dominant knee extensors of the fast-moving goalies and defender was statistically higher ($p < 0.05$) than that of the attackers and midfielder. The work of the stents of the goalkeepers and slow-moving defender was statistically superior to that of the attackers and midfielder at the dominant knee ($p < 0.05$) as well as for the non-dominant knee ($p = 0.02$).

Discussion

Conclusion

Concentric isokinetic evaluation revealed independently of the anthropometric characteristics, a difference in muscular force strength according to the position occupied by Moroccan amateur footballers.

References

No conflict interest

Abstract: 263 - Date: 2019-06-30 22:25:39pm

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Topic of Summary

Special therapeutic methods in PRM

Title of Summary

Our protocol for the treatment of secondary upper limb lymphedema

Keywords

Lymphedema; PMR; quality of life

Authors

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Introduction

The lymphoedema of the upper limb secondary to treated breast cancer, has a considerable psycho-social impact by pain, functional discomfort and degradation of the quality of life that it generates. We conducted a study on the management of these patients in PMR. The goal was to get indolence, restore an esthetic member, reduce the psychological impact and prevent recurrence.

Materials & Methods

Prospective study from January 2012 to October 2016, about 62 cases. The evaluation was based on the following criteria: EVA (pain); volumetric measurement of the upper limb; quality of life EORTC QLQ C30 version3 and EVA Satisfaction-patient. The treatment technique: Manual lymphatic drainage, daily bandage, therapeutic education and physical exercise. Duration of treatment: 6 to 8 weeks

Results

Our patients were young with an average age of 45 years, like the general population. Manual lymphatic drainage combined with specific bandage allows a significant decrease in volume ($p = 0.01$) as well as pain and improvement of quality of life with considerable satisfaction (50% on the EORTC QLQ scale).

Discussion

Conclusion

Lymphoedema of the upper extremity represents a real physical and psychological handicap where the contribution of MPR is very beneficial.

References

Abstract: 274 - Date: 2019-07-02 23:04:00pm

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Topic of Summary

PRM in paediatric problems

Title of Summary

The urodynamic profile of children with myelomeningocele

Keywords

Urodynamic profile; myelomeningocele

Authors

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Department of Physical Medicine and Rehabilitation

Introduction

Myelomeningocele is one of the leading causes of children and teenagers's disability. The aim of this study is to analyze the results of the urodynamic profile of children with myelomeningocele

Materials & Methods

Retrospective, descriptive and analytical study about children and teenagers suffering from myelomeningocele and seen during the neuro-urology consult at the Department of Physical Medicine and Rehabilitation from 2017 to 2019

Results

The average age was 11.9 ± 5.8 years (28 children) with a female predominance of 57.7%; The vesicosphincteric disorders were pollakiuria, urinary incontinence, urinary urgency and dysuria associated with constipation. The urodynamic profile was marked by detrusor sphincter dysynergia in 7.7%, significant post void residual volume in 26.9%. Bladder compliance was decreased in 61.5% with phasic and terminal detrusor overactivity in 84.7% including 38.5% that are dangerous for the upper urinary tract

Discussion

Conclusion

Advances in Neurosurgery and Urology have efficiently reduced mortality in newborns. Urodynamic exploration allows to prevent urological complications (hypertrophic bladder, vesico-ureteric reflux, ureterohydronephrosis with chronic kidney disease) by early management of urinary disorders

References

Abstract: 276 - Date: 2019-07-03 17:22:16pm

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Topic of Summary

PRM in geriatric conditions

Title of Summary

Orthostatic hypotension and age-related sarcopenia

Keywords

Elderly, Orthostatic Hypotension, Sarcopenia

Authors

Kudret Keskin; Selda Çiftci; Jülide Öncü; Güneş Melike Doğan; Gökhan Çetinkal; Süleyman Sezai Yıldız; Serhat Savaş; Kadriye Orta Kaşıkçı MD, d

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Health Sciences University, ĀziĀyli Hamidiye Etfal Education and Research Hospital, Department of Cardiology; Health Sciences University, ĀziĀyli Hamidiye Etfal Education and Research Hospital, Department of Physical Medicine and Rehabilitation

Introduction

In our study, we sought to determine the association of sarcopenia with orthostatic hypotension which is a significant precursor to falls and related injuries.

Materials & Methods

Outpatients over 75 years of age were prospectively enrolled and those who were eligible underwent comprehensive sarcopenia assessment including measurement of muscle mass, strength, physical performance, anthropometric measurements along with frailty tests. Patients who were classified as sarcopenic or non-sarcopenic based on these measurements underwent both supine and standing blood pressure measurements. The frequency of orthostatic hypotension was compared between the two groups.

Results

Overall 91 patients were enrolled in the study. Of these patients 29 (31.9%) had sarcopenia. Mean age was 79.3 ± 4.0 and 73 (80.2%) were female. There was no statistical difference in measurements of functional tests which consisted of gait speed, timed up-and-go test and handgrip strength. However, timed sit-to-stand test values were higher in sarcopenic patients (18.2 ± 7.9 vs 15.0 ± 5.1 $p=0.04$). Patients with sarcopenia developed orthostatic hypotension and intolerance more often compared to the non-sarcopenic patients ($n=15$ [50.0%] vs $n=14$ [23.0%] $p<0.01$ and $n=13$ [44.8%] vs $n=9$ [15.3%] $p<0.01$ respectively). The adjusted odds ratio for sarcopenia was 3.3 (1.1-9.2 95% CI, $p=0.02$).

Discussion

Conclusion

Age-related sarcopenia increases the risk of orthostatic hypotension in the elderly. This may in part explain the increased incidence of falls and also help identification of risky elderly patients for orthostatic blood pressure drops.

References

Abstract: 277 - Date: 2019-07-06 16:15:19pm

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Topic of Summary

PRM in geriatric conditions

Title of Summary

ELDERLY SARCOPENIA AND DIABETES MELLITUS TYPE II

Keywords

elderly, sarcopenia, diabetes mellitus type II

Authors

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Introduction

Body's composition analysis for assessing the health and nutrition of the individual is a useful test. Diseases such as diabetes mellitus may be associated with adverse changes in body composition. Sarcopenia is characterized by a progressive and generalized loss of skeletal muscle mass and functionality. However, there is a lack of studies that examine the association of sarcopenia in patients with type 2 diabetes mellitus (T2DM).

Materials & Methods

We studied 35 individuals who visited endocrinological outpatient clinics, aged 20-80 years, to assess the presence of sarcopenia in T2DM in comparison with 16 controls. All subjects were examined with DXA (HOLOGIC HORIZON W). Sarcopenia was defined using the European Working Group on Sarcopenia in Elderly, EWGOSP) that includes both muscle mass (skeletal muscle index, SMI) and muscle function/physical activity (walking speed as a measure of physical performance). Appendicular skeletal mass (ASM) (in kg) was delivered from DXA. The skeletal muscle index (SMI) was calculated as ASM divided by the square of the body height in meters. Low muscle mass is defined as SMI <7.0 kg/m² in males and SMI <5.7 kg/m² in females. Low physical performance was defined as a walking speed of <0.8 m/s.

Results

The incidence of sarcopenia was significantly higher in patients with T2DM than in healthy subjects (27% vs. 20%, $p=0.01$ for sarcopenia) and higher in elderly participants (70 y and over) vs. younger (40% vs. 12%, $p<0.001$). Walking velocity was significantly lower in patients with T2DM than in controls men and women (1.02 ± 0.34 vs. 1.25 ± 0.15 , $p<0.001$) and (1.01 ± 0.22 vs. 1.27 ± 0.12 , $p<0.001$), respectively.

Discussion

Conclusion

The prevalence of sarcopenia in patients with T2DM is moderate and gradually increases significantly in older men.

References

Abstract: 278 - Date: 2019-07-06 16:31:42pm

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Topic of Summary

Community medicine and associative networks in handicap

Title of Summary

Education Program for Carers in Facilities with Neuro Disabled Subjects (EPoCFiNDS)

Keywords

Carers, Aging, Neurodisability, Rehabilitation, Care

Authors

Yannis Dionyssiotis; Eleftheria Vellidou; Stathis Konstantinidis; Pavlos Sarafis; Sofia Artemi; Katerina Stergiopoulou; Anne Mette Vind; Niculina Birsanu; Sophie Duport; Dimitrios Koutsouris; and EPoCFiNDS Consensus attendants group

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National and Technical University of Athens, Greece; Foundation for Care of Neurological Illnesses, Greece; University of Nottingham, UK; Social and Health School Herning, Denmark; Asociatia Habilitas Bucharest, Romania; Royal Hospital of Neurodisability London, UK; Cyprus University of Technology, Cyprus

Introduction

The goal of Education Program for Carers in Facilities with Neuro Disabled Subjects (EPoCFiNDS), is to create training programs for carers in neurodisabled subjects living in various facilities.

Materials & Methods

We are aiming to develop a systematic approach on supporting professional carers to acquire and develop professional skills and key competences in order to work with people who suffer from neuro-disabilities. This approach will be the basis on developing training programs for carers throughout different European facilities

Results

The skills acquired by carers in their caring role are relevant to the competencies required for occupations and qualifications in community, aged care, health, youth, housing and disability support services. With the aging population the number of subjects with neurological lesions living in hospices and long-term care facilities is increased. It makes a strong case to educate carers to help these subjects. There is a lack of evidence on how to design and implement mechanisms such as foundation skills courses and programs to best meet the needs of carers.

Discussion

Conclusion

In Europe we need to develop educational programs, aimed at volunteers, relatives or any other group of people so that they better organize benefits care for neurodisabled subjects.

References

Education Program for Carers in Facilities with Neuro Disabled Subjects (EPoCFiNDS) is an Erasmus+ Project (Code: 2018-1-EL01-KA202-047936)

Abstract: 281 - Date: 2019-07-07 08:19:38am

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Topic of Summary

Robotics, virtual reality and innovatives techniques in PRM

Title of Summary

Developing countries : how simple tele-care could support functioning recovery.

Keywords

Recently are encreasing many Telerehabilitation proposal and settings, surely effective and usefullness, but needing relevant investments and to be based on strong Health Services. Impossible to be applied in developing countries where Rehabilitation services need to develop and have very often great distances to overcome after discharge, to support and verify the real functioning recovery. So a simple solution based on tele-care focused on aspects and parameters regarding patient health, training and performance , covering also indications and support for family and community .In this way we could have real positive outcome and in the same time demonstration about the relevance and efficacy of PRM interventions from acute up to community.

Authors

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Introduction

Discuss to reach if possible an agreement about this proposal.

Materials & Methods

Define a modality for this Tele-Care focused on distance recovery finishing.

Results

Create a working group to apply this modality, for example in some relevant health conditions as Stroke and SCI, in developing countries.

Discussion

Conclusion

To support PRM Service development in Health and Community services in developing Countries

References

none

Abstract: 282 - Date: 2019-07-07 08:32:11am

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Topic of Summary

Rehabilitation services in Mediterranean countries and Africa

Title of Summary

Community health services and Primary Rehabilitation services in developing countries

Keywords

Community based , Primary Rehabilitation interventions

Authors

Alessandro Giustini

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Santo Stefano Rehabilitation Group-Italy

Introduction

To avoid misunderstanding regarding Community Based Rehabilitation as a substitute for PRM in developing countries.

Materials & Methods

To decline and specify contents and modality for Primary Rehabilitation services and interventions, connected with specialized PRM facilities, in the whole Community activity toward disabled people

Results

To share PRM knowledge and activities into the community before and after specialized interventions, to help efficacy up to participation and functioning.

Discussion**Conclusion**

To show the relevance of PRM participation , in developing countries too, to built a complete Health Service defending as necessary (and possible) disabled people rights.

References

none

Abstract: 285 - Date: 2019-07-09 11:34:42am

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Topic of Summary

PRM and oncologic patients

Title of Summary

Stewart–Treves syndrome: A rare complication of breast cancer related-Lymphedema

Keywords

breast cancer-related lymphedema, complication, Stewart Treves syndrome

Authors

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Introduction

The Stewart-Treves syndrome is an angiosarcoma developed on a longstanding lymphadenomatous extremity. We report the case on a Stewart-Treves syndrome in a woman who underwent modified-radical-mastectomy for breast-carcinoma nine-years earlier and having breast cancer-related lymphedema (BCRL) for 7 years.

Materials & Methods

A 56-year-old woman presented to our institution with chronic lymphedema of the left arm. She had modified radical mastectomy for grade 2 invasive ductal breast cancer in 2007. She had received chemotherapy, irradiation and hormonotherapy in 2007. Lymphedema was present for more than 7 years. She denied any trauma or infection history. Her physical examination revealed stage-2-lymphedema with Stemmer sign positivity, in the right upper extremity. Ånspection indicated a tender purplish lesion (1.5 cm x 4 cm) on the medial half of the patient's affected arm. Depending on the metastasis suspicion, MRI was requested. Up to the MRI report; the lesion has spreaded-out quickly with different-sized scattered pink and purple-colored lesions on the affected area.

Results

A prompt skin biopsy was performed and reported as lymphangiosarcoma (Stewart-Treves syndrome). The consultation with patient's oncologist and orthopedist revealed with amputation decision. An immediate arm amputation was performed. On her final visit-2

months after the operation, the amputation scar was healed clearly and pregabalin was prescribed for the phantom pain.

Discussion

Conclusion

In conclusion Stewart-Treves Syndrome is a rare but important complication of BCRL. The awareness and detailed investigation as well as prompt surgical procedures are needed for BCRL patients with different and fast-progressing skin lesions.

References

Abstract: 286 - Date: 2019-07-09 11:41:55am

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Topic of Summary

PRM and oncologic patients

Title of Summary

THE DEMOGRAPHIC AND CLINICAL CHARACTERISTICS OF PATIENTS IN A UNIVERSITY LYMPHEDEMA REHABILITATION CENTER

Keywords

lymphedema, etiology, rehabilitation, frequency

Authors

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Introduction

Lymphedema is a major healthcare problem in both developed and developing countries. The aim of this study was to evaluate the etiological frequency and characteristics of lymphedema-patients who presented to lymphedema unit between November 2016–December 2019.

Materials & Methods

All patients referring to lymphedema unit were screened and the frequency regarding to the etiologies of the lymphedema were determined. The demographic and clinical characteristics were recorded.

Results

A total of 565 patients with lymphedema were presented to our lymphedema unit during 2 years (mean age: 54.12±11.75years). 10.5% patients had primary and 89.5% had secondary lymphedema. 542 (95.9%) patients were female and 23 (4.1%) were male. 33.5% of patients were obese. Most of the patients with secondary lymphedema had upper extremity lymphedema due cancer surgery (84.6%). The etiology of lower-limb lymphedema was also cancer in majority of the patients (43%), followed by phlebo-lymphedema (30%) and lipedema (12%). The duration of lymphedema was more than six months in most of the patients (77.1%) and the stage of lymphedema was commonly spontaneous irreversible (63.1%). 44.6% of the patients stated that they did not receive any therapy for lymphedema.

Discussion

Conclusion

Majority-of patients had secondary upper extremity lymphedema due to breast cancer surgery. The referring time to lymphedema unit was long and lymphedema stage was progressed at submission in majority of the patients. We suggest educational activities for both patients and health care providers, especially in cancer-surgery wards in order to increase the awareness of lymphedema and facilitate early reference to the lymphedema units for lymphedema rehabilitation.

References

Abstract: 288 - Date: 2019-07-10 07:05:12am

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Topic of Summary

Robotics, virtual reality and innovatives techniques in PRM

Title of Summary

Applying Transcranial Direct Current Stimulation in a cognitive rehabilitation program: Differences observed in focal and diffuse lesions

Keywords

tDCS, cognitive rehabilitation, stroke, TBI

Authors

Eleftherios Stefas; Alexandra Pantartzidou; Yannis Dionyssiotis; Dimitra Minaritz; Evgenia-Peristera Kouki

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Introduction

We aimed to investigate the benefits of Transcranial Direct Current Stimulation (tDCS) in patients with left/right focal brain damage and diffuse lesions i.e. traumatic brain injury (TBI). We hypothesized that tDCS will have a positive impact on the individuals' outcome.

Materials & Methods

We applied tDCS during the rehabilitation program of 10 patients with focal stroke-related lesions (six right and four left), and four TBI patients 14 individuals as controls, who received treatment as usual. Mean age was 58.92 years, and 59.87 years, for tDCS group and controls, respectively. Mean duration of hospitalization was 68.57 days and 69.57 days for the tDCS and control group, respectively. Montreal Cognitive Assessment (MoCA; Nasreddine et al., 2005) was administered for baseline and outcome measures.

Results

Participants who had received tDCS demonstrating higher performance on the outcome measure, compared to the control group. Within the experimental group, participants with TBI demonstrated quicker recovery compared to participants with right/left CVA. Age ($\rho=-0.086$, $p=0.664$) and duration of hospitalization ($\rho=0.223$, $p=0.255$) were not associated with final cognitive outcome.

Discussion

Conclusion

Our findings support the positive impact of tDCS on all three groups of neurological patients. Individuals with TBI benefitted equally from a regular rehabilitation program as they did when tDCS was implemented, as supported by previous research. Participants with focal damage demonstrated significant improvement when they attended a session that incorporated tDCS. Future work should extensively investigate which factors maximize tDCS's influence on cognitive recovery.

References

Abstract: 291 - Date: 2019-07-10 10:54:57am

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Topic of Summary

Orthotics and prosthesis in PRM

Title of Summary

Functional independence of multiple limb amputees, caused by Purpura Fulminans infection, after Inpatient rehabilitation at a Rehabilitation Centre

Keywords

amputees, prosthesis, PMR, inpatient rehabilitation

Authors

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Introduction

Following the amputation of a limb the path to regaining functional independence is often long and arduous, in the case of a multiple limb amputation, it becomes even more challenging. Amputations caused by Purpura Fulminans (PF) are a rare occurrence, secondary to an acute infection and subsequent intravascular thrombosis with necrosis of the skin and subcutaneous tissues. Besides the amputation commonly affecting multiple limbs other common sequelae of this syndrome are, organ dysfunction, adjustment disorder and extensive wounds. We describe the inpatient rehabilitation program by a multiprofessional team which included rehabilitation nurses, Physical Therapists, Occupational therapists, Orthoprotetic technicians and lead by a PMR specialist. Rehabilitation management, common obstacles and medical complications, prosthetic considerations as well as which infectious agents caused the infection are discussed.

Materials & Methods

In this retrospective study we review the cases of 7 patients, with multiple limb amputations following PF, who underwent an intensive inpatient rehabilitation program at our Rehabilitation center. We compare their Functional Independence Measure (FIM) scores and adjustment to prosthetics, at admission and discharge. We also describe the main medical problems and occurrences during their rehabilitation programs.

Results

Every patient was fitted with custom made prosthesis and improved their FIM, during the rehabilitation program. Skin problems (pressure ulcers and slow scarring of the tissues) where the most common complication.

Discussion

Conclusion

Inpatient multiprofessional rehabilitation programme is an effective to treat and rehabilitate patients with these problems.

References

Abstract: 293 - Date: 2019-07-10 22:23:51pm

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Topic of Summary

PRM in paediatric problems

Title of Summary

Screening and prevention of hip dislocation in cerebral palsy.

Keywords

cerebral palsy, hip dislocation, Reimers index

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Introduction

Report the different sub types of cerebral palsy observed in the Orthopedic Rehabilitation consultation and focus on the use of the Reimers index in the screening and management of progressive hip subluxation particularly in children with high risk.

Materials & Methods

Cross-sectional study September 2017- September 2018.\r\nList all sub types of cerebral palsy oriented to Pediatric Orthopedic Rehabilitation. \r\nPelvic X-ray to all at-risk patients, calculate Reimers index. Preventive treatment of all children with an index higher than 10%.\r\n

Results

90 Children with cerebral palsy were seen in consultation among them 40 children had the quadriplegic form (at high risk of developing hip excentration), 18 Children have a Reimers index higher than 10%, 9 have light excentration.\r\nAfter treatment there was stabilization of the index in 8 patients.\r\n

Discussion

Conclusion

The Reimers index is a good tool for screening a silent hip dislocation.

References

Abstract: 295 - Date: 2019-07-11 09:22:49am

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

Age- and Sex-specific Effects in Paravertebral Surface Electromyographic Back Extensor Muscle Fatigue in Chronic Low Back Pain

Keywords

muscle fatigue, low back pain, surface electromyography, aging

Authors

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Introduction

The impact of aging on back muscles is not well understood, yet may hold clues to both normal aging and chronic low back pain. This study sought to investigate whether the median frequency (MF) surface electromyographic (SEMG) back muscle fatigue method – a surrogate measure of glycolytic muscle metabolism - would be as sensitive as it is in healthy individuals to detect age- and sex-specific differences in neuromuscular and muscle metabolic functions in individuals with cLBP in a reliable way.

Materials & Methods

With participants seated on a dynamometer (20° trunk anteflexion), paraspinal SEMG activity was recorded bilaterally from the multifidus (L5), longissimus (L2) and iliolumbalis (L1) muscles during isometric, sustained back extensions loaded at 80% of maximum from 117 younger (58 females) and 112 older (56 female) cLBP individuals. Tests were repeated after 1-2 days and 6 weeks. Median frequency (MF), the SEMG variable indicating neuromuscular fatigue, was analyzed.

Results

Maximum back extensor strength was comparable between younger and older participants. Significantly less MF-SEMG back muscle fatigue was observed in older than younger, or in older female than male cLBP individuals. Relative reliability was excellent, but absolute reliability appeared large for this SEMG-fatigue measure.

Discussion

Conclusion

Findings suggest that neuromuscular changes that may occur with the perception of cLBP unlikely mask the age-specific diagnostic potential of the MF-SEMG back extensor fatigue method. Thus, this method possesses a great potential for being further developed toward a valuable biomarker intended to very early detect back muscle function at risk for sarcopenia.

References

Abstract: 296 - Date: 2019-07-11 11:04:59am

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

Fatigue, fear of falling, health-related quality of life and mood in falling pregnant women

Keywords

Balance, Fall, Fatigue, Health Profile, Mood, Pregnancy

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Introduction

There are studies on the deterioration of balance and postural stability in pregnant women. In this study, we aimed to evaluate the relationship between fatigue, fear of falling, emotional state and health-related quality of life of individuals falling during pregnancy.

Materials & Methods

130 singleton pregnant were included the study and they were divided into two groups as falling pregnant women and non falling pregnant women. Pregnancy in one group was performed one-leg balance test. Fatigue severity scale, Beck depression inventory, international fall efficiency scale, Nottingham health profile tests were applied to both groups. The obtained data were compared between the groups.

Results

Fatigue severity scale (group 1: 4.9 ± 1.6 , group 2: 4.0 ± 1.8 , $p: 0.002$), Beck depression inventory (group 1: 23.9 ± 12.5), group 2: 10.8 ± 7.3 , $p < 0.001$), international fall efficiency scale (FES) (group 1: 39.5 ± 10.5 , group 2: 26.6 ± 6.6 , $p < 0.001$), Nottingham health profile scores (group 1: 321.9 ± 123.1 , group 2: 189.4 ± 96.1 , $p: < 0.001$) were significantly higher in falling pregnant women. Also, there was a positive correlation between fall efficiency scale

and fatigue severity scale (r: 0.442, p <0.001), BDI (r: 0.738, p <0.001) and nothingam health profile (r: 0.713, p <0.001) and an significant negative correlation between one-leg balance test (r: -0.355, p <0.001).

Discussion

Conclusion

Fatigue, depression, fear of falling and balance disorder may cause falls in pregnant women.

References

Abstract: 299 - Date: 2019-07-11 15:49:28pm

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Topic of Summary

PRM in paediatric problems

Title of Summary

SENSITIVITY OF ELECTROMYONEUROGRAPHIC PARAMATERES IN SHORT TERM FUNCTIONAL OUTCOME OF PEDIATRIC PATIENTS WITH TRAUMATIC PERONEAL NERVE LESION

Keywords

Electromyoneurography; Functional outcome; Peroneal nerve lesion; Children

Authors

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Introduction

We aimed to analyze the sensitivity of electroneurographic (ENG) and electromyographic (EMG) parameters in the evaluation of traumatic peroneal nerve lesion in pediatric population with regards to treatment outcome.

Materials & Methods

The prospective study included 34 patients with acute lesions of peroneal nerve (LPN). Age range was 5-16 years with compressive etiology. The diagnostics was done between 10-14 days post lesion onset. Amplitudes, distal latencies (DL) and conduction velocities were analyzed in ENG and pathological spontaneous activity and motor unit action potentials

(MUAP) in EMG. Children were functionally analyzed initially at exam and 3 months after the lesion onset.

Results

Decrease in amplitudes along with increased distal latencies in ENG and presence of spontaneous pathological activity on EMG are shown to have the strongest correlation with decreased functional outcome of muscles innervated by peroneal nerve, while the presence of sporadic spontaneous pathological activity with amplitudes in normative ranges on ENG are shown to have not very strong correlation with functional outcome. Isolated increase in distal latencies are shown to have weak correlation with functional outcome.

Discussion

Conclusion

Both ENG and EMG parameters are shown to be sensitive in evaluation of short term functional outcome in patients with LPN, with higher sensitivity when presence of pathological findings were noticed both in ENG and EMG studies. These findings might have impact in defining treatment protocols for patients with LPN for best optimal functional recovery both short term and long term.

References

Abstract: 301 - Date: 2019-07-12 09:39:53am

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

UTILITY OF SRS – 22 IN THE MANAGEMENT OF IDIOPATHIC SCOLIOSIS: WHAT WORRIES OUR PATIENTS.

Keywords

Idiopathic Scoliosis. SRS-22. Quality of Life.

Authors

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Introduction

Scoliosis is a three-dimensional spine deformity (frontal and sagittal planes) defined by a Cobb's angle $>10^\circ$. Non-operative treatment is based on observation or corrective casts and part- or full-time rigid orthosis. Treatment's goals are: prevent curve progression and consequently surgery, improve patients' aesthetic and quality of life (QoL). \r\nThe aim of this study is to evaluate the impact of scoliosis.

Materials & Methods

We selected a group of 46 patients treated in our service from September to December 2018. SRS-22 assesses QoL in 5 dimensions: function, pain, self-image, mental health and treatment's satisfaction. Using SPSS 22.0 we analyzed the relationship between sex (male, female;), chronological curve (early onset, adolescent, adult;), type (simple, double), severity (mild, moderate, severe, according to SOSORT's classification), treatment (observation, orthopedic) and SRS-22 dimension's average score. All subjects included signed informed consent.

Results

Significant differences were found in pain ($p<0.049$) and self-image ($p<0.001$) depending on curve's severity, being greater in severe ($> 40^\circ$). Likewise, significant differences were observed according to chronology for function ($p<0.003$), pain ($p<0.001$) and self-image ($p<0.044$) in all groups, being higher in adults. Mental health has a greater significant impact on females ($p<0.001$). Self-image has a greater significant impact on patients treated with reduction and orthosis ($p<0.043$).

Discussion

Conclusion

Our results supports the usefulness of SRS-22 in determining the impact on QoL and it is one of the factors we must take into account on the management of these.

References

PhD. Alfonso Muriel García. Bioestadística Clínica. Instituto Ramón y Cajal de Investigación Sanitaria (IRYCIS).

Abstract: 302 - Date: 2019-07-12 15:31:54pm

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Topic of Summary

Advances in PRM diagnostics

Title of Summary

DEVELOPMENT OF ULTRASOUND BIOMARKERS FOR THE DIAGNOSIS AND FOLLOW-UP OF SARCOPENI

Keywords

Sarcopenia, dual energy X-ray absorptiometry (DXA), ultrasound, exercise

Authors

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Introduction

The estimation of appendicular muscle mass is necessary for the diagnosis of sarcopenia. Ultrasonography presents several advantages in the examination of musculoskeletal system, compared to other imaging modalities. However, its role in the diagnosis of sarcopenia is still under investigation. The purpose of our study is to evaluate: (a) the reliability of quantitative ultrasound measurements of facial, upper and lower limb muscles; (b) the usefulness of ultrasonography in the diagnosis of sarcopenia; and (c) the efficacy of a specialized exercise programme.

Materials & Methods

The study included 85 individuals over 65 years of age. They were assessed according to the diagnostic algorithm suggested by the revised European consensus on definition and diagnosis of sarcopenia (EWGSOP2). Individuals fulfilling the clinical diagnostic criteria underwent full body dual energy absorptiometry for the estimation of appendicular muscle mass. All participants of this study were examined by ultrasound of facial, upper and lower limb muscles. Sarcopenia was diagnosed in 20 out of 85 individuals. Sarcopenic patients were referred to an exercise program comprising strengthening and balance exercises for 12 weeks, after which clinical and laboratory tests were repeated.

Results

The preliminary data of our study indicate that quantitative musculoskeletal ultrasound is a reliable imaging modality for the estimation of skeletal muscle mass. Portability, non-exposure to ionizing radiation and reduced cost of ultrasound equipment are important advantages over the gold standard imaging techniques used in the diagnosis of sarcopenia.

Discussion

Conclusion

Ultrasound can become an important diagnostic tool in the assessment of sarcopenia.

References

Operational Program “Human Resources Development, Education and Lifelong Learning”, the European Union (European Social Fund/ ΕΣΠΑ 2014- 2020) and Greek national funds.

Abstract: 304 - Date: 2019-07-13 16:41:53pm

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

The Effect of Vitamin D and Exercise on Balance in Postmenopausal Women: A prospective, randomized, controlled, single blinded study

Keywords

balance; exercise; fall risk; vitamin D

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Introduction

To evaluate the effects of vitamin D3 and exercise on balance, fall risk and quality of life in postmenopausal women.

Materials & Methods

In this prospective, randomized, controlled, single-blind study, postmenopausal women with vitamin D3 <10ng/ml and >30 ng/ml were included. Patients with <10ng/ml vitamin D3 were randomized to 3 groups: group-I (vitaminD3 replacement, 50.000IU vitaminD3/oral/8 weeks), group-II (core and balance exercises), and group-III (vitaminD3 replacement, 50.000IU vitaminD3/oral/8 weeks plus core and balance exercises). The participants with >30ng/ml vitamin D3 (group-IV) were designed as control group and received the core and balance exercises. The participants were evaluated before and after 8 weeks with Berg balance scale, Biodex balance system (postural stability tests and fall risk assessment) and Nottingham Health Profile (NHP). (NCT036084889)

Results

Ninety-nine participants (n= 21, 18, 20, 40, respectively) completed the study. Baseline clinical characteristics and balance scores were similar. Control group had significantly lower baseline scores of NHP in total, pain, emotional reactions, and social isolation. All groups had significant improvement in balance scores. Group I had significantly better NHP scores except energy domain. Group II had better NHP scores but the difference was not significant. Group III and IV had significant improvements in emotional reactions, physical activities, and total score of NHP.

Discussion

Conclusion

Although there was no difference in the baseline balance scores according to vitamin D levels, both balance and quality of life parameters were improved with exercise and vitamin D replacement. Vitamin D3 and exercises are essential for balance and fall prevention in postmenopausal women.

References

Abstract: 306 - Date: 2019-07-13 17:31:43pm

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

Predictive factors of functional outcome after total knee replacement

Keywords

total knee arthroplasty; functional outcome; quality of life

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Introduction

to determine the predictive factors of good functional outcome after Total Knee Arthroplasty (TKA) and to evaluate its impact on patients' Quality Of Life (QOL).

Materials & Methods

It was a cross sectional study over a three-month period (November 2018-January 2019) including 37 patients and 50 TKAs (13 bilateral operations). Patients were operated by the same surgeon and received the same type of prosthesis. The functional outcome and the QOL were assessed according to the WOMAC score and to the SF-36 score.

Results

The median age was 69 years. Women represented 75.7% of cases. Patients suffered from their knee osteoarthritis for a mean period of 7 years and 10 months before surgery. They were assessed at a mean period of four years and eight months after TKA. Predictive factors of good functional outcome were age<65years (OR=19.2; p=0.011); good preoperative WOMAC score (OR=18.1; p=0.007) and low preoperative level of pain (OR=9; p=0.028). Good mental and physical QOL were associated to good postoperative functional result (WOMAC) and to patients' satisfaction.

Discussion

Conclusion

According to our results, younger patients (age<65 years), those with better preoperative WOMAC score and lower preoperative pain were 19 times, 18 times and 9 times more likely to have good functional results respectively. Baseline scores seem to be the best predictors of the outcome after TKA. Being such simple and reproducible measures, their systematic use can eventually help in the management of the long waiting lists of patients needing total knee replacement. \r\n\r\n

References

this work was conducted in accordance with current ethical standards and regulations in biomedical research

Abstract: 312 - Date: 2019-07-14 17:45:32pm

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Topic of Summary

PRM and oncologic patients

Title of Summary

Life expectancy of the oncologic patients after their discharge from inpatient rehabilitation program

Keywords

cancer, rehabilitation, life expectancy

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Introduction

Treatment advances have led to improved survival rates in cancer patients. As a result, patients with physical impairments as a consequence of their disease or from its treatment are living longer and becoming a potential client of medical rehabilitation services. Despite of treatment effectiveness improvement, a stigma about cancer patients still exists and they are perceived as a palliative population with short survival and poor rehabilitation potential. \r\n\r\nThe aim of the study was to find out, if the life expectancy of oncological patients after discharge from inpatient rehabilitation differs significantly from other groups of patients.

Materials & Methods

56 patients passed away after discharge from Rehabilitation Department of Soroka Medical Center over the past 3 years. All patients were divided into 5 groups, according to their diagnosis: Cancer, Stroke, Amputee, Fracture and Deconditioning. Life expectancy after discharge in days, Functional Independence Measure (FIM) at discharge and discharge destination were fixed from medical records and analyzed for all patients.

Results

FIM at discharge was quite similar in all groups (respectively 95.4, 75.3, 91.0, 80.6, 85.6) and about 60-70% of patients discharged home in all diagnostic categories. Oncology patients' post-discharge life expectancy was found to be not significantly different from any other admission diagnosis: 259.6 for cancer, 264.3 for deconditioning, 193.2 for amputees, 384.0 for stroke and 365.0 for fractures.

Discussion

Conclusion

Our study strengthens the recent data about the importance of inpatient rehabilitation program for cancer patients and sheds light on their life expectancy after discharge from the rehabilitation department.

References

Abstract: 314 - Date: 2019-07-14 21:00:51pm

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Topic of Summary

Rehabilitation services in Mediterranean countries and Africa

Title of Summary

Integrated Continuous Care after a Stroke – the Portuguese experience

Keywords

stroke; dependency; Bamford classification; hospitalization discharge; continuous care unit

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Introduction

The Portuguese National Network of Integrated Continuous Care (NNICC) consists of a group of public and private institutions that provide health care and social support to patients in situations of dependency, both at home and/or in their own facilities. The aim of this study is to retrospectively analyze the admission of stroke patients to NNICC Units (NNICCU).

Materials & Methods

A sample of 251 patients admitted to the Stroke Unit with ischemic stroke was distributed according to the Bamford Stroke Classification (deaths were excluded). All patients were evaluated in regards to rehabilitation potential and need to maintain inpatient rehabilitation program after clinical discharge. Information on NNICCU admission was collected. Data was analyzed with IBM SPSS 25.0. Survival analysis using Kaplan Meier curves and Logrank tests were performed.

Results

The admission to a NNICCU was the destination of 33.9% (n=85) of patients, at hospital discharge. In regards to the subtype of stroke, 52.6% (n = 51) of TACI patients, 29.8% (n=14) of POCI patients, 22.7% (n=10) of PACI patients and 15.9% (n=10) of LACI patients were admitted to a NNICCU. Hospitalization length's median value was 24 days for patients who were later admitted to NNICCU versus 7 days for the remaining patients (p<0.001).

Discussion

Conclusion

Despite its necessity in some cases, referring to NNICCU can contribute to increased hospital length-of-stay. Prolonged length-of-stay is associated with increased mortality and poor clinical and functional outcomes. The majority of patients admitted to NNICCU had strokes involving larger brain territories.

References

Abstract: 316 - Date: 2019-07-14 22:23:24pm

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Topic of Summary

Special therapeutic methods in PRM

Title of Summary

Efficacy of Platelet-Rich Plasma Injections for Osteoarthritis

Keywords

Platelet-Rich Plasma, Osteoarthritis, Hip, Knee

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Introduction

Platelet-rich plasma (PRP) is an autologous concentration of cytokines growth factors from platelets in plasma, which is used to repair damaged cartilage, tendons, ligaments, muscles, or bone. There is still no complete scientific and clinical consensus on the PRP procedure for the treatment of osteoarthritis. However, scientists and clinical experts who have reviewed the existing body of research believe the evidence is largely encouraging and merits further investigation. The objective of this study was to test the efficacy potential of PRP for treatment hip (HOA) and knee osteoarthritis (KOA).

Materials & Methods

PRP was isolated from brachial artery, controlled by ultrasound, of 100 persons ranging in age from 18 to 65 years, during the first half of 2018. After isolation and activation, those instillations of PRP were done in HOA and KOA, grade II-III. Patients were examined for range of motion, improvements in VAS scale, WOMAC score, and ultrasound properties of articular cartilage through the International Cartilage Repair Society (ICRS) grades, three, six and twelve months after intraarticular application.

Results

Treated patients showed a significant improvement in all parameters compared to the period before the application ($p < 0.05$). Changes in range of motion, VAS scale and WOMAC score are registered immediately after three months of procedure, and improvements were maintained they were held throughout the first year of their PRP procedure. After three months significant differences were observed in the ultrasound measurement of the cartilage thickness.

Discussion

Conclusion

This research into the applications of PRP for HOA and KOA has indicated efficacy this treatment.

References

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

EFFECT OF ELECTROMAGNETIC FIELD ON FIBROMYALGIA SYMPTOMS AND SCORES

Keywords

Fibromyalgia, electromagnetic field.

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Introduction

Noting that fibromyalgia patients scuffle with communal symptoms of electrosensitivity , we aim to study the possible relation between fibromyalgia scores and exposure to electromagnetic radiation.

Materials & Methods

The study included 80 FMS patients diagnosed according to ACR 2010. The Revised Fibromyalgia impact questionnaire (FIQR) was used for functional assessment.. Psychological condition was assessed using Montgomery-Asberg Depression Rating Scale (MADRS). The patients answered a questionnaire assessing the magnitude of exposure to electromagnetic field . Device use index was calculated by multiplying the rate of its use per day by 365 by the total number of years of use. The indices were correlated with fibromyalgia scores including wide spread pain index (WPI), system severity score (SS), visual analogue pain score (VAS) , FIQR and MADRS.

Results

Presence of a near-by cellular phone or electric tower didn't significantly affect disease scores, nor VAS ($p > 0.05$). Microwave users had a higher SS and WPI scores than non-users, but the difference was not statistically significant ($p = 0.079$ & 0.057) respectively. SS score significantly increased with higher TV watching duration while MADRS score significantly decreased with higher cellular phone use indices. The cellular phone use index was positively correlated with VAS among patients less than 30 years old but negatively correlated with MADRS score among patients group from 30-50 years old ($P = 0.01$ & 0.005 respectively) .\r\n\r\n

Discussion

Conclusion

This study highlights a pathological link between fibromyalgia and exposure to electromagnetic devices. This could possibly be one of the underlying or at least augmenting factors of fibromyalgia symptoms.

References

Abstract: 323 - Date: 2019-07-15 06:46:04am

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Topic of Summary

PRM in orthopaedics and musculoskeletal disorders

Title of Summary

Clinical outcomes of femur lengthening with two different techniques in achondroplastic patients

Keywords

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Introduction

Comparison of two different techniques of lengthening: external circular external and circular external fixator over and intramedullary nail.

Materials & Methods

twelve achondroplastic patients with a mean age of 18.4 years (range: 16-19y) were divided in two groups based on their treatment. Gruppo A was treated by only an external fixator while group B was treated with external fixator over and intramedullary nail. The Healing index, patient's satisfaction index and Knee ROM at the end of treatment and at 6 and 12 months after frame's removal were calculated.

Results

mean lengthening obtained at the end of treatment was 8,67 cm (range 8- 9 cm) for group A and 8,75 for group B (range 8-10). Time to removal was 398 days (range:372- 415 days) for group A vs 263 days of group B (range:236 to 310 days) \r\nRegarding the Healing index a statistically significant reduction was observed in patients intramedullary nail (p value < 0,001). \r\nRange of Motion at the time of frame's removal was 80,83°,102,50° at 6 months and 118,33° at 12 months for group A. Range of Motion at the time of frame's removal was 90°, 126,67° at 6 months and 129,2° at 12 months for group B\r\n

Discussion

Conclusion

The principal advantages of lengthening over and intramedullary nail include reduction of the time to keep the frame offering major tolerability and comfort for the patients, protects the regenerated bone from fractures, avoid joint rigidity and reduce the time necessary rehabilitation

References

Abstract: 324 - Date: 2019-07-15 06:58:48am

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PRM in orthopaedics and musculoskeletal disorders

Title of Summary

Distal humerus fractures treated with plates versus external fixation: comparison of clinical and rehabilitation outcomes

Keywords

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Introduction

Surgery of different fractures permits immediate bone alignment and early mobilization with good functional outcomes, compare rehabilitation outcomes of distal humerus fractures treated by plates and external fixator with mini-lag screws

Materials & Methods

The medical records of 25 patients with supra-intracondylar humerus fractures were reviewed retrospectively. In 15 (9 M: 6 F-mean age 68.1y Group A) reduction was obtained using K wire or mini screws and an external fixator was placed. In 10 (5 M: 5 F-mean age 60.4y Group B) fixation was obtained by locking compression plates. Clinical evaluation and X-rays were performed at 1,2,3,6 and 12 months. The Mayo Elbow Performance Index, VAS and final elbow ROM were used to evaluate functional outcomes.

Results

Complete bone healing was obtained in 52.2 days in Group A and in 94.5 days in Group B. Radial nerve palsy was recorded in 2 patients of Group A. Mean elbow flexion and extension were 112.4° and 16.3° in Group A, while 133° and 13.5° in the Group B respectively. The clinical outcomes using MEPI and VAS were similar in both groups (90-100 in 83% of the patients, 75-89 in 13% and <40 in 4%).

Discussion

Conclusion

Surgical treatment of supra and intercondylar humeral fractures with an external fixator compared to plates and screws grants elbow stability with good clinical and radiological results. However, LCP allows anatomical reduction, elbow stability with better functional results, early mobilization and restores elbow's ROM even if periosteal damage and prolonged immobilization are higher when compared to external fixator.

References

Abstract: 329 - Date: 2019-07-15 12:50:46pm

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Topic of Summary

Neurorehabilitation, spasticity

Title of Summary

Characterization of aphasia in stroke patients in a hospital rehabilitation unit

Keywords

aphasia; communication; stroke; rehabilitation

Authors

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Affiliations

Introduction

Characterize a sample of stroke patients admitted to a hospital rehabilitation unit regarding aphasia.

Materials & Methods

Selection of the files of all stroke patients admitted to a hospital rehabilitation unit in the years 2017-2018.
Collection of data regarding: presence, type and severity of aphasia according to bedside screening at admission and evaluation using the Lisbon Aphasia Examination Battery (LAE); length of hospitalisation; Functional Independence Measure (FIM) at admission and discharge.

Results

136 patients were included. 22.8% presented with aphasia according to bedside screening however, after applying the LAEA, only 19.1% were confirmed to have aphasia. There were also discrepancies in the aphasia types comparing to bedside screening with the most frequent incorrect diagnosis being motor transcortical. The most frequent type was Global (32.3%) and the least frequent was conduction (0%).
According to LAEA scores, global aphasia presented with the most marked communication deficits while anomic presented with the least.
Aphasic patients were hospitalized for an average of 53.8 days and had an average FIM score of 51.2 at admission and 76.4 at discharge, compared to an average of 40.9 days of hospitalisation, 75.9 FIM score at admission and 93.1 at discharge for non-aphasic patients.

Discussion

Conclusion

Aphasia prevalence was according to the reported in the literature.
Aphasia was associated with worse functional outcomes and increased length of hospitalisation.
The degree of communication impairment varied with the type of aphasia.
Diagnosis may be complicated by the presence of concomitant problems such as dysarthria or apraxia.
Objective measures like the LAEA are useful for diagnosis and grading.

References

Abstract: 330 - Date: 2019-07-15 12:59:33pm

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Topic of Summary

Neurorehabilitation, spasticity

Title of Summary

Injected muscles and treatment goals for botulinum toxin use in a real-life post-stroke spasticity outpatient clinic

Keywords

spasticity; goals; botulinum toxin; stroke; rehabilitation

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Introduction

To describe treatment goals and target muscles for botulinum toxin (BTX) in a group of stroke patients.

Materials & Methods

Data retrieved from clinical files of all stroke patients treated in the spasticity clinic of a rehabilitation centre in 2017, regarding: injected muscles, toxin doses and treatment goals. Goals were grouped into 7 categories: pain/ discomfort, involuntary movements, range of motion, passive function, active function, cosmesis/ facilitation of therapy, mobility.

Results

126 post-stroke patients included (68.6% ischaemic, 31.4% haemorrhagic). 46 different muscles targeted in a total of 1821 injections. We identified 66 different goal statements in 665 individual treatment goals, concerning both upper and lower limbs. The most frequently injected muscles were flexor digitorum superficialis (8.73%), gastrocnemius medialis and lateralis (7.85%), brachialis and flexor digitorum longus (6.53%). The most chosen treatment goals were: decreasing associated reaction of elbow flexion (19.25%), decreasing claw toes during the stance phase of gait (9.47%), improving ankle control during swing phase of gait (7.67%), reducing shoulder pain (6.17%), facilitating placement of hand orthosis (5.11%). Category wise: 35.8% of goals related to active function, 27.8% to involuntary movements, 16.8% to pain/ discomfort, 9.2% to passive function, 6.0% to cosmesis/ facilitation of therapy and 4.4% to range of motion.

Discussion

Conclusion

The most frequently chosen goals related to active function, mainly aiming for improvement of gait, followed by reducing associated reaction of elbow flexion. Most frequently injected muscles were the ones most involved in the above mentioned goals, which corroborates our philosophy of patient centred and goal oriented intervention.

References

Abstract: 331 - Date: 2019-07-15 13:02:34pm

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Topic of Summary

PRM in paediatric problems

Title of Summary

Thirteen years of experience with biologic drugs in patients with juvenile idiopathic arthritis

Keywords

juvenile idiopathic arthritis, biologic drugs, outcome

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Introduction

to assess efficacy and safety of treatment of biologics in children suffering from JIA.

Materials & Methods

Retrospective study included 180 patients (F/M 121/59) treated with biologics from 2006-2018. in Institute of Rheumatology Belgrade.

Results

The most of patients were treated with etanercept 148 (82,2%), 61 (33,9%) adalimumab, 26 (14,4%) tocilizumab, 4 infliximab, 2 golimumab, 1 rituximab and 1 anakinra. 47 (26,1%) pts, had to be switched to another drug because of inefficacy or adverse event. At the last visit 111 (61,7%) pts. were in remission on drug, 28 (15,6%) remission without drug, 27 (15%) were active, for 13 (7,2%) outcome was unknown. Relapse was most common in patients with extended oligo 31,1% pts. and 26,2% pts. with RF neg. pJIA. Serious adverse events during observation period recorded : cerebrovascular event, toxic hepatitis, active TBC, exitus, perianal abscess, scarlatina, pneumocystis carini pneumonia. During 13 yrs. of treatment 10 (5,6%) developed uveitis de novo (all treated with etanercept). Three patients got new autoimmune diseases: psoriasis, inflammatory bowel disease, lupus like syndrome.

Discussion

Conclusion

Biologics exhibited high level of efficacy in suppression of inflammation and reaching remission in JIA patients. Children with extended oligo JIA most frequent relapsed. It is necessary carefully long lasting following the patients because of potentially development serious adverse events or new autoimmune diseases.

References

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PRM in paediatric problems

Title of Summary

Childhood disability in Morocco

Keywords

Childhood, disability, Morocco, prevalence

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Introduction

This research aims to describe the epidemiological profile of the child's disability in Morocco

Materials & Methods

A descriptive cross-sectional multicenter study was conducted from March 2015 to May 2018. 559 children with different causes of disability were included in our study.

Results

The average age of our population is of average age of 9 +/- 4.98. The male sex is predominant in 60%.
The causes of childhood disability are dominated by cerebral palsy (33.1%), followed by trisomy (15.2%), mental retardation (14.3%) and autism (13.8%).
The most common types of disability are motor impairment (49.2%), intellectual disability (30.6%), cognitive impairment (15.2%), sensory impairment (4.3%) and lastly polyhandicap (0.7%).

Discussion

Conclusion

it is urgent to develop the rehabilitation services specialized in the pediatric rehabilitation in the different networks and levels of care of the Moroccan health system with the creation of poles of excellence by type of disability and disease the most currents.

References

Abstract: 334 - Date: 2019-07-15 15:31:17pm

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Topic of Summary

Sports injury rehabilitation

Title of Summary

Epidemiology of shoulder injuries in young elite archers

Keywords

archery, shoulder injuries, teenagers, prevention

Authors

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Introduction

Main objective of this study was to assess the prevalence of shoulder pain among young athletes exposed to high intensity training in archery.

Materials & Methods

This is a cross-sectional epidemiological study performed in the city of Patras, Greece, during the European Youth Championship (EYCh2018-Patras). Data were collected using a structured questionnaire administered by four interviewers (physiotherapists) in order to explain any question, if necessary. Questionnaire consists of a number of questions including demographics, the presence, duration, frequency, and intensity of pain as measured by the visual analogue scale (VAS), and the need of medication or physiotherapy. Additionally, information on duration, frequency, and intensity of training, years of competitive experience and number of competitions per year were also obtained by the questionnaire.

Results

200 young archers (104 males - 96 females) from 34 countries were participated. The mean age of the participants was 16.9 years old (SD=1.7), with 6.5 years (SD=2.8) of mean competitive experience and the mean number of 11.7 competitions per year (SD=13.3). 43.5% (87/200) experienced shoulder pain while training, 30% needed medications in order to be able to train, 52.3% used physiotherapy and 31.8% had to stop training due to injury. Mean pain duration was 3,9 months (SD 12.6) and mean pain intensity was 5.94 (SD 6.1).

Discussion

Conclusion

Due to anatomy and biomechanical demands, shoulder injuries are a common occurrence in arching even in teenagers. The appraisal of this epidemiologic information by clinicians should contribute to the design of sport specific training and prevention programs.

References

Abstract: 337 - Date: 2019-07-15 18:53:58pm

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Topic of Summary

Neurorehabilitation, spasticity

Title of Summary

Sport, a pathway for reintegration of post-traumatic paraplegics

Keywords

Spinal cord injury, disability, reintegration, rehabilitation, sport

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Introduction

Despite the progress in the field of sport for the disabled persons, many Tunisian paraplegics do not exercise physical activity; what are the main reasons?

Materials & Methods

Prospective descriptive study 3 months in 2019 of the the profile of a population of Tunisian post-traumatic paraplegics <T5 in wheel chair facing the practice of physical and sports activities.\r\nAssessment by questionnaire (socio-family characteristics, the date of the attack and the cause of the paraplegia, the previous sporting level and the interest of the interviewee for the sport as well as the possible obstacles), ASIA, Ashworth, FIM , MOS SF36\r\n

Results

30 subjects, mean age 28 years, 26 singles, 1 year 1 / 2 -6 years evolution of SCI, no return to work for 28 cases, 65% no sports practice before.\r\nAll the parameters were better in 15 sports paraplegics than in 15 non-athletes (FIM 122.4 / 95.73, MOS SF36 93.78 / 41.84).

Discussion

Conclusion

Sport is useful in the acquisition of autonomy, functional independence, improvement of quality of life, achievement of psychic balance and reintegration in acquired disabilities.

References

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Abstract: 340 - Date: 2019-07-15 20:04:22pm

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Topic of Summary

Special body function problems e.g. spasticity, urinary system, sexuality, dysphagia, speech disorders and others

Title of Summary

Modalities of the therapeutic education of urinary and anorectal disorders in a Tunisian rehabilitation department

Keywords

therapeutic education- intermittent catheterization-anorectal disorders

Authors

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Introduction

The hospitalization of patients with neurological disorders in physical medicine department allows a multidisciplinary assessment including urinary disorders (UD) and anorectal disorders (ARD) .The aim of this study was to show the modalities of therapeutic education (TE) for these disorders.

Materials & Methods

Prospective study focused on hospitalized patients in a tunisian Physical between September and December 2018 including patients hospitalized for neurological diseases with UD and ARD. For each patient, we have established therapeutic education.

Results

We included 28 patients divided into 3 groups: Group 1: 10 patients with a mean age 39.7 years, sex ratio 2.33 and disorders evolving since 2.5 months. All patients were under indwelling catheter and had Bristol score 2.2. Intermittent catheterization was performed with acceptability in 8 cases. Group 2: 13 patients middle age 40 years, sex ratio 1.16 and disorders evolving since 7 years. The daily excretion was applied by 5 patients. The UD and ARD stopped leisure in 9 cases. The use of antiseptics was noted in 4 cases. Group 3: 5 children aged 14.4 years and disorders since 5 years. All were wearing diapers and were under intermittent hetero catheterization. The brake to the practice of self intermittent catheterization was the lack of knowledge of the anatomy in 2 teenage girls.

Discussion

Conclusion

TE in hospitalized patients allows a global and multidisciplinary approach according to international guidelines. The barriers to TE must be identified and treated according to the clinical and social context.

References

Abstract: 341 - Date: 2019-07-15 20:10:28pm

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Topic of Summary

PRM and oncologic patients

Title of Summary

Physical Medicine and Rehabilitation Intervention in a Haematology Unit

Keywords

Immobilization syndrome; Bed rest; Functional capacity; Haematology malignancy; Rehabilitation

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Introduction

Immobilization syndrome has extremely important and negative impact on patient's functional capacity, particularly in vulnerable patients such as patients with haematological pathology. Most of the patients admitted at our haematology department have haematological malignancy and reasons for hospitalization vary between cycles of induction chemotherapy

(which are responsible for periods of hospitalization around 30 days), consolidation chemotherapy and other events affecting the clinical status of the patient. In order to prevent immobilization syndrome all patients admitted at the haematology department are evaluated by a Physical and Rehabilitation Medicine Physician and those at higher risk of immobilization syndrome are included in Rehabilitation Programs during the hospitalization time.

Materials & Methods

Retrospective analysis of all patients admitted at the Haematology department included in Rehabilitation Programs, from January to December 2018, regarding age, diagnosis, hospital length of stay and number of days until the start of the Rehabilitation Program.

Results

During the year 2018, 555 patients were admitted at the Haematology department and mean hospital length of stay was 15 days. From these patients, 334 (60%) were included in Rehabilitation Programs.

Discussion

Conclusion

Prolonged bed-rest and immobilization effects are well-known and have high impact in morbidity and mortality among patients who are hospitalized. Deleterious effects of prolonged bed rest in patients are independent of the factors associated with the hospitalization, and include loss of strength, aerobic capacity and a reduction in physical activity. Rehabilitation Programs, specially including physical therapy, present as a useful tool in preventing immobilization complications.

References

Abstract: 348 - Date: 2019-07-15 22:51:40pm

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Topic of Summary

Cardiovascular and pulmonary prevention and rehabilitation

Title of Summary

Pulmonary Functions and Health-Related Quality of Life among Silica-Exposed Workers In Morocco

Keywords

Pulmonary Functions, Health-Related Quality of Life, Silica-Exposed Workers, Morocco

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Introduction

Silicosis is a fibrosing and irreversible lung disease. Currently, 1470 living silicosis in Morocco in 2018 and more people working in underground mines. The aims of this study were to evaluate the influence of the patients' functional capacity on subjective well-being (SWB) and quality of life (QOL), provide the scientific basis for further intervention measures, and improve their health status.

Materials & Methods

A cross-sectional design was used for this study. We investigated 147 patients with silicosis during March 2018 to September 2018. The 6-minute walk test (6MWT) and sit-to-stand test (SST) were the major methodology used to evaluate the functional capacity, the St. George's Respiratory Questionnaire (SGRQ) to evaluate the QOL.

Results

In Morocco, patients with silicosis had low QOL with average of total Saint George score (SGT) at 68.02 +/- 19.54% . The distance of 6MWT suggested a significant and positive correlation with QOL of patients with silicosis.

Discussion

Conclusion

The QOL of patients with silicosis is still relatively low and their health status needs improvement. A pulmonary rehabilitation program must be set up very quickly to improve their well-being.

References

Abstract: 350 - Date: 2019-07-15 22:59:43pm

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Topic of Summary

Cardiovascular and pulmonary prevention and rehabilitation

Title of Summary

attitude and practice of physiotherapists towards Promoting physical activity for people with cardiovascular disability

Keywords

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Introduction

This qualitative study explored the Knowledge, attitude and practice of physiotherapists in Morocco toward promoting physically active recreation for adults with cardiovascular disease.

Materials & Methods

A cross-sectional study design was used and an online survey questionnaire was created with 20- item which collected information on physical activity promotion in physiotherapy practice. 145 Moroccan practicing physiotherapists from various public and private hospitals were included.

Results

There were 94 respondents, 34% in public hospitals and 39% are men. 95% of respondents never studied physical activity as part of their initial physiotherapy training and only 5% of respondents have ever received continuing education in physical activity. 82% of respondents have already rehabilitated patients suffering from cardiovascular pathologies and still without a medical prescription of physical activity. 53% of our population are strongly agreed with the statement & # 171; physical activity is a therapeutic agent and acts as a drug& # 187; and 66% agree on the effectiveness of physical activity in patients with cardiovascular disorders. 89% of physiotherapists confirm that there is a lack of knowledge of cardiac rehabilitation and all participants want to introduce a physical activity module in the physiotherapists' initial training curriculum.

Discussion

Conclusion

we report poor understanding and knowledge of PA recommendations, and physiotherapists' knowledge seems insufficient to inform and encourage cardiovascular patients to use the AP. A specific module on PA and Cardiovascular Rehabilitation is needed in the initial education and training of physiotherapists.

References

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Topic of Summary

Neurorehabilitation, spasticity

Title of Summary

Rehabilitation in ALS - Survival analysis

Keywords

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Introduction

Amyotrophic lateral sclerosis (ALS) is a rare degenerative motor neuron disease associated with significant disability. The main goal in the management of ALS is to provide clinical and functional support to prolong survival and ameliorate quality of life. The impact of rehabilitation programs in ALS is not completely clear. We aim to evaluate the overall survival of ALS patients' and the potential impact of rehabilitation programs.

Materials & Methods

We retrospectively reviewed health records of ALS patients followed at a Neurology Department in the northeast region of Portugal for the 2005-2017 period. Data were analysed with SPSS 25.0. Relevant clinical information was collected for survival analysis using Kaplan-Meier and Cox regression.

Results

75 ALS cases were identified in the studied period. Information regarding symptom onset was only available for 62 (83%) patients. The overall median survival from symptom onset was 1142 days. Bulbar ALS cases presented a median survival from symptom onset of 912 days vs. 1708 days in the spinal cases ($p=0.004$). Survival did not statistically differ between rehabilitation and non-rehabilitation groups. Overall post rehabilitation median survival was 1322 (95%CI:628,560-2015,440] days. Both LogRank test and Cox regression using ALS subtype (bulbar and spinal cases) as covariate did not show significant results regarding post rehabilitation survival ($p=0.657$; HR=0.910 [95%CI: 0.324-12.552], $p=0.113$; respectively).

Discussion

Conclusion

Rehabilitation intervention did not impact ALS survival in our study. However, our analysis is limited by the small sample size. Studies with more participants and better data quality are required to estimate the possible impact of rehabilitation in ALS.

References