P121-e

Assessment of therapy effects on muscles in chronic low back pain
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Keywords: Low back pain; Muscle strength; Spas-phischatery
Objective.– Assessment of spa-physical therapy effects in chronic low back pain (CLBP) treatment, using three axis isoinerterial dynamometer Isostation B200.
Method.– This study included 29 patients with CLBP. Pain intensity was measured by VASpain. Functional status of lumbar-sacral musculature was analyzed by Isostation B200. First group was treated with hidrokinsey and TENs therapy, the second group with hidrokinsey therapy, during 10 days treatment.
Results.– Increase of average torque (trunk extendors for 57.93%, rotators for 61.62%, flexors for 28.36%), range of motion (rotation for 37.16%, flexion and extension for 27.43%, lateral flexion for 27%), average speed of motion (flexion for 20.38%, extension for 23.77%) was registered within HKT group. Pain intensity also decreased for 47.83% (P < 0.001).
Conclusion.– Results indicate efficiency of spa-physicaltherapy in the treatment of patients with CLBP. Isoinertial dynamometer Isostation.
http://dx.doi.org/10.1016/j.rehab.2014.03.721

P122-e

Mesotherapy in the treatment of regional musculoskeletal pain in rehabilitation medicine
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Keywords: Mesotherapy; Musculoskeletal pain
Aim.– To determinate the contribution of mesotherapy in the treatment of patients with regional musculoskeletal pain.
Methods.– Mesotherapy consists in the injection of procaine, thiocholchicoside and piroxicam intradermally over the affected zone. Subjects were assigned to receive 4 weeks treatments.
Results.– The mean age of patients was 47 years. The mean duration of the symptoms was 49 months. The main indication of mesotherapy is chronic low back pain (42%), followed by neck pain (13%), osteoarthritis (14%), lateral epicondylitis (20%) and shoulder pain (10%). Participants reported a slight discomfort at the time of the inoculation in the neck region. Mesotherapy shows more effective results in pain intensity and self-satisfaction (57.2%). Patients receive 4 weeks treatments.
Discussion.– Our results suggest that the response to mesotherapy may be greater in the short term follow-up. This technique could be a viable option as an adjunct treatment in an overall treatment planning of regional musculoskeletal pain.
http://dx.doi.org/10.1016/j.rehab.2014.03.722

P123-e

Diabetic foot osteomyelitis reason for amputation, study in rehabilitation setting
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Keywords: Diabetic foot; Osteomyelitis; Infection; Amputation
Introduction.– Diabetic foot infection is the main cause of amputation in 25–50% of diabetic patients. Osteomyelitis occurs in 20% of diabetics with infection in the lower extremities rising up to 60%. The purpose of this study is to identify whether diabetic patients with osteomyelitis manage to heal and avoid amputation following clinical and biochemical characteristics.
Material & methods.– Five year study in “Anagenissi” rehabilitation center of 40 patients with diabetic foot. Age, sex, previous hospitalization, type of diabetes, HbA1c, Charcot arthropathy, ulcer site and duration, presence of neuropathy and/or PAD, inflammatory markers, history of previous infection were recorded. Tissue cultures and radiologic assessment were performed. Patients were treated with surgical debridement and antibiotics. Healing was defined as complete epithelization without amputation.
Results.– Thirty-one patients had successful conventional therapy, 5 were eventually amputated and in 4 patients vascular surgery was necessary. Staphylococcus aureas was the most common pathogen isolated.
Discussion.– Osteomyelitis should be of high suspicion in diabetic foot ulcer even when bone is not exposed and antibiotic treatment should apply according to results of cultures (mainly from bone biopsy). Surgery should be reserved only for cases that fail to respond to medical treatment.
http://dx.doi.org/10.1016/j.rehab.2014.03.723

P124-e

Medial tibial stress syndrome – a case report
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Keywords: Medial tibial stress syndrome; Lower extremity injuries; Tibia; Shin; Stress; Reaction
Introduction.– Medial tibial stress syndrome (MTSS) is a frequent injury of the lower extremity and one of the most common causes of exertional leg pain among military personnel, runners and athletes involved in jumping activities. There is no consensus regarding the aetiology of this disease. Functional anatomical changes, biomechanical abnormalities and physical training errors have been proposed as predisposing mechanisms for the development of MTSS. A systematic history and physical exam are usually sufficient to make the diagnosis therefore imaging is usually not necessary. Conservative treatment is almost always successful. Surgery is usually reserved for refractory cases.
Observation.– A 14-years-old caucasian female, with exercise-induced bilateral leg pain, starting after beginning basketball practice, located along the posteromedial border of the tibia. Physical examination showed tenderness at palpation of the middle tibial regions bilaterally and biomechanical abnormalities of the lower limb bilaterally, namely genu valgus, femoral anteverision and hyperpronation of the subtalar joint. The MRI showed peristoeal edema on the left postemedia1 border of the tibia and progressive periosteal and bone marrow edema on the right leg. She underwent analgesic treatment and a physical therapy program, with improvement of clinical features.
Conclusion.– Prompt diagnosis and appropriate management of MTSS is important. Prevention is the key.
http://dx.doi.org/10.1016/j.rehab.2014.03.724

P125-e

Dislocation of the shoulder in elderly patients over 50 years: About 23 cases
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Keywords: Diabetic foot; Osteomyelitis; Infection; Amputation
Introduction.– Diabetic foot infection is the main cause of amputation in 25–50% of diabetic patients. Osteomyelitis occurs in 20% of diabetics with infection in the lower extremities rising up to 60%. The purpose of this study is to identify whether diabetic patients with osteomyelitis manage to heal and avoid amputation following clinical and biochemical characteristics.
Material & methods.– Five year study in “Anagenissi” rehabilitation center of 40 patients with diabetic foot. Age, sex, previous hospitalization, type of diabetes, HbA1c, Charcot arthropathy, ulcer site and duration, presence of neuropathy and/or PAD, inflammatory markers, history of previous infection were recorded. Tissue cultures and radiologic assessment were performed. Patients were treated with surgical debridement and antibiotics. Healing was defined as complete epithelization without amputation.
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Discussion.– Osteomyelitis should be of high suspicion in diabetic foot ulcer even when bone is not exposed and antibiotic treatment should apply according to results of cultures (mainly from bone biopsy). Surgery should be reserved only for cases that fail to respond to medical treatment.
http://dx.doi.org/10.1016/j.rehab.2014.03.723
Keywords: Shoulder dislocation; Elderly people; Rehabilitation

Purpose.– Show evolutionary features of this condition, determine the incidence of associated lesions and interest capital for early and appropriate rehabilitation.

Patients and methods.– Prospective study of 23 cases of anteromedial dislocation of the shoulder in patients aged 50 years and older. This was a first episode in all cases. There was no neurovascular disorder associated. Dislocation was secondary to a fall low kinetics in 12 patients. After reduction, all patients had a contention by a type bandage Dujarrier. Rehabilitation was started after 10 days.

Results.– After a mean follow-up of 8 months, according to the results of trading ROWE were excellent or good in 75% of cases. We had 2 cases of recurrence. Seven patients had a lesion of the rotator cuff in ultrasonography.

Discussion.– In the elderly, the risk of recurrence is low, but morbidity is different, especially related to tendon injuries of the rotator cuff or neurological damage. This low rate of recurrence has been wrongly regarded as benign and they have been only a few publications.

http://dx.doi.org/10.1016/j.rehab.2014.03.725

P126-e

Synovitis of hand revealing a paraneoplastic syndrome: Report of a case

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Keywords: Synovitis; Arthralgia; Paraneoplastic syndrome

Introduction.– Paraneoplastic rheumatic syndromes include symptoms related to occult neoplasia or already recognized often malignant. They are not explained by a compression by tumor invasion or synovial or periarticular bone metastasis.

Observation.– A 63-year-old man with a chronic history as smoking and diabetes, initially looking for adhesive capsulitis of the right shoulder with good evolution, it also presented 2 months after a bilateral inter phalangeal joint synovitis followed by proximal polynarthritis the predominant hip on the right side without clinical signs of arthritis.

A biological and radiological assessment was performed objectifying an incomplete picture at the right iliac bone. MRI of the pelvis revealed a regular gap in right iliac bone with pathologic examination objectified a secondary location of a well-differentiated adenocarcinoma. PET scan has objectified a triple localization of a metabolically active process in the adrenal, spleen and right iliac bone.

Discussion.– Paraneoplastic rheumatic syndromes can reveal the tumor responsible for adapting the strategy of paraclinical explorations.

http://dx.doi.org/10.1016/j.rehab.2014.03.726

P127-e

Trial to treat the exertional compartment syndrome of the forearm by botulinum toxin

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Keywords: Exertional compartment syndrome; Forearm; Botulinum toxin; Intramuscular pressure

Objective.– A first trial to treat the exertional compartment syndrome of the leg by botulinum toxin (BT) is beneficial to exertional pain and pathological intramuscular pressure (IMP) with a 9-month follow-up [1]. Do these results exist in the exertional compartment syndrome of the forearm (FA-ECS)?

Methods.– The treatment with BT injections (Dysport) of the 7 muscles of the anterior compartment of the forearm the FA-ECS patients with pathological IMP and without other diseases. Follow-up of the clinical exam and of the IMP.

Results.– Two motorcyclists patients are included. Follow-up during 6 and 9 months. The exertional pain during motorcycling disappeared. The IMP is assessed in only one patient at 4 post-treatment months and became normal. A weakness is observed in the 2 patients during 3.5 and 4 months and was assessed between 2/5 and 4/5 in function of the muscle and the patient.

Conclusion.– In these 2 first cases of FA-ECS, the BT effectiveness was similar to the BT effectiveness in ECS of the leg but with a transitory disabling weakness. A best adjustment of the BT doses is necessary before to start a therapeutic trial.

Reference
http://dx.doi.org/10.1016/j.rehab.2014.03.727

P128-e

Questionnaire to evaluate musculoskeletal disorders among musicians

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Keywords: Musculoskeletal; Disorders; Musicians; Questionnaire; Risk factors

Most professional musicians will suffer, at some point in their career, of playing related musculoskeletal disorders (PRMD). Better knowledge about these specific professional problems is needed, in order to define risk factors that could predict PRMD and to improve preventive and therapeutic measures. The aim of this study is to develop a questionnaire that could be used by researchers and physicians to undertake a detailed baseline assessment of musicians.

Many professional musicians around the world, specialists in different types of instruments that played in the international music festival (Italy, 2013) were invited to participate. The final instrument was divided in three sections: biometrics data and general physical care; player performance profile; player injury profile. The survey’s content and length were found to be acceptable by the subjects. All participants filled the survey with the research team present in the room, and it seemed like there were no apparent major problems with the subjects’ interpretation of the questions. The need to undertake a detailed baseline assessment of musicians was the stimulus to build and formalise this instrument. The survey should prove useful to researchers to evaluate PRMD and can be used in an injury surveillance program.

http://dx.doi.org/10.1016/j.rehab.2014.03.728

P129-e

Handball and angular knee deformities in schoolgirls

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Keywords: Genu valgus; Genu varus; Knee; Handball

Introduction.– Various knee deformities may have a direct impact on the modification of gait kinematics. Physical activity and sport could influence development of skeleton of children.

Objective.– To investigate degree of knee angular deformities in the girls training handball.

Methods.– Sixty-seven girls, average age of 14 years were included in our research (33 girls were training handball and 34 girls were untrained). The degree of genu valgus and genu varus was established in both groups of girls by physical examination and estimated by score from 0 to 4. “0” was estimated the normal finding.

Results.– Average score of valgus knee deformity in the girls that were training handball was 0.24±0.6 and in the untrained girls 0.52±0.82. Difference was not statistically significant (t=1.37, P>0.05). Average score of varus knee deformity was 0.08±0.4 in the training girls, and 0.2±0.5 in the untrained. The difference was statistically significant (t=2.29, P<0.05).

Discussion.– Varus knee deformities were significantly more rarely present in girls that were training handball in comparison to untrained girls of the same age.