

greater in the laser therapy and exercise group ($p < 0.05$). *Conclusion:* Our data show that the combination of supervised exercise program and laser therapy was superior compared to exercise program alone in the treatment of TMJ arthrosis. *Keyword:* temporomandibular joint, arthrosis, laser therapy, exercise.

PA211

Prevalence of Cervical Pain and Functional Disability in the School Community

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Background: The school community is exposed to numerous risk factors for the occurrence of neck pain. These symptoms may cause restrictions on their functional capacity and there's a need to make a proper measurement of this phenomenon, in a valid and reproducible manner. For this, the most recommended instrument is the Neck Disability Index (NDI); however its use in Portugal requires an analysis of its psychometric properties. *Aim(s):* To contribute to the validation of the NDI-PT applying this instrument in a school community to establish the levels of prevalence of neck pain and associated disability. *Methods:* On the first phase we used the SF-36 and twice the NDI-PT with an interval of 48 hours to 160 individuals ($n=160$) with chronic neck pain with no specific cause. Criterion validity was assessed using the Pearson correlation coefficient, to the construct validity, we proceeded to a factor analysis, internal consistency was made with Cronbach's α coefficient and test-retest reproducibility with ICC. In the second phase, there was the application of NDI-PT in 110 individuals ($n=110$), resorting to the frequency analysis, the measures of association such as chi-square test and Fisher exact test and Odds Ratio. *Results:* correlation between the subscales of the SF-36 and NDI-PT varies between 0.41 and 0.73, the factor analysis extracted two factors and no variable was lower absolute value to 0.40, so the items are related. The Cronbach's $\alpha=0.92$ and ICC=0.85. Regarding prevalence, 63.2% reported symptoms; the most affected group was the masculine, teachers and those who are between 46 and 65. The score of NDI-PT is higher in females, the auxiliary and between 46 and 65. *Conclusion:* the NDI-PT is considered adequate and there is a high prevalence of neck pain in ESTSP.

PA212

A Strong Lie: Clenched Fist Syndrome

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Introduction: Clenched Fist Syndrome is a type of factitious disorder in which the patients present with flexion contractures of the fingers without an organic pathology. Although the origin of this table is psychiatric, patients mostly apply to branches related with muscle and skeleton system. *Case:* We report here a case of 26 year-old male admitted to our hospital due to the pain and frequently repeated tightly clenched fist in his right hand. He did not bring his finger extension actively and passive movements of hand was not possible by reason of the fact that the pain. Allodynia was present on his sensory examination. Gabapentine for allodynia and rehabilitation programme consisting of whirlpool, TENS and ROM exercises for getting hand function again was begun. Somatoform scores were higher in his MMPI evaluation. His EMG findings were normal. He was diagnosed with clenched fist syndrome and psychotherapy sessions added in his treatment. After a 3- week follow-up period showed pain decrement and hand functions improvement. *Conclusion:* Besides the difficulty of diagnosis, treatment is quite hard in clenched fist syndrome. An early recognition and treatment is important in this syndrome, particularly for prevention of unnecessary diagnostic studies and therapies.

PA213

Effect of Subacromial Sodium Hyaluronate Injection on Rotator Cuff Disease

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Background: Rotator cuff disease is a common cause of shoulder pain. There are studies about the effectiveness of sodium hyaluronate injection on shoulder and knee pain, but few studies demonstrating the efficacy of sodium hyaluronate ultrasonography guided injection for rotator cuff disease. This study evaluates effectiveness of ultrasonography guided subacromial sodium hyaluronate injection in patients with impingement syndrome without rotator cuff complete tear. *Materials and Methods:* This prospective, double-blind, placebo controlled clinical trial study was performed among 40 patients with subacromial impingement syndrome without complete tear of rotator cuff. Patients randomly injected ultrasonography guided in 2 groups: Case group by 20 mg of sodium hyaluronate (Fermathron™) and control group by 0.9% normal saline. Both groups received 3 weekly injections. The pain score (100 mm visual analogue score [VAS]) was evaluated before first injection and one week after each injection. The constant score was evaluated before first and 12 week after last injection. Data was analyzed statistically by Independent *t*-test. *Results:* In both groups mean VAS has decreased, but more significantly in case group ($P < 0.001$). Mean constant score was significantly higher in case group 12 weeks after last injection ($P < 0.001$). The constant score improved 12 weeks after the last injection in both groups with a significantly better result in case group ($P < 0.001$). *Conclusion:* Subacromial injections of sodium hyaluronate are effective in treating rotator cuff disease without complete tears.

PA214

Comparative Efficiency of Osteopathic and Orthodontic Treatment in Facial Pain Patients Associated with Temporomandibular Joint Disorders

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Introduction: According to WHO data 40% of people from 20 to 50 years old have temporomandibular joint disorder (TMJ). In most cases this pathology don't manifest itself due to wide compensatory possibilities of jaw muscles. Although, they don't pay sufficient attention to TMJ disorders in patients with facial pain. Etiological factors provoking development of given pathology is malocclusion, teeth extraction, whiplash injury, bruxism. It's necessary to take into account all significant factors to play a part in facial pain generation in patient with TMJ disorders. Therefore, multidisciplinary medical assistance for successful treatment needed. *Material and Methods:* This study includes patients with TMJ disorders confirms clinical data. All patients divided in three groups: first group in number 8 patients had osteopathic treatment (1 procedure twice in a week during two weeks); second group in number 7 patients had orthodontic therapy by individual occlusal splint during two weeks; third group in number 8 patients had both osteopathic and orthodontic treatment also in two weeks. Superficial electromyography and stabilometry made before and after treatment. Activity of m. masseter, m. temporalis, m. sternocleidomastoideus, m. trapezius measured in both side in resting state and maximal clutch. Assessment of postural state made in european stand with opened and closed eyes, resting jaw muscles and maximal clutch. *Results:* Positive changes exists in all three groups. Although, in second and third groups stabilometry data significantly changed in comparison to first group. It means more centered position of total pressure center, less square and length of statokinesiogram. This changes suggest that orthodontic treatment