SAT0133 PREDICTORS OF PAIN AND ITS CHANGE OVER TIME IN FIBROMYALGIA

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Background Widespread pain is the central feature of fibromyalgia (FM). The role of physical as opposed to psychological mechanisms in FM pain remains a matter of controversy.

Objectives In the present study, we evaluated the dependency of FM pain on other FM clinical features as assessed by the Fibromyalgia Impact Questionnaire (FIQ).

Methods Forty two consecutive patients, who had been followed up for at least 2 months, were enrolled. Their mean (SD, range) age, disease duration and follow up duration were 42 (12, 15–78), 8 (11, 0.3–45) and 2.9 (2.2, 0.28–8.6) years, respectively. They completed FIQ scores as applied to their health status at enrolment in the clinic and at the time of the study. Statistical analyses were done by simple linear regression analyses and one-way analysis of variance. Results were expressed as mean (SD) and a $p < 0.05$ was considered significant.

Results The pain visual analogue scale was 8.9 (1.3) at enrolment versus 2.4 (1.9) at the time of the study ($p < 0.001$). At enrolment, pain was predicted by morning tiredness ($p < 0.001$), FM symptom interference with work ($p < 0.001$) and stiffness ($p = 0.001$). At the time of the study, pain was predicted by tiredness ($p < 0.001$), morning tiredness ($p < 0.001$), FM symptom interference with work ($p = 0.003$) and stiffness ($p = 0.03$). Improvement in pain was predicted by pain at enrolment ($p = 0.007$) (and by no other baseline FIQ scores) and improvements in tiredness ($p < 0.001$), morning tiredness ($p < 0.001$), FM symptom interference with work ($p < 0.001$) and stiffness ($p = 0.002$).

Conclusion Pain and fatigue were strongly interrelated in our FM patients. The physical symptoms fatigue, stiffness and FM symptom interference with work consistently predicted FM pain and its change over time. In contrast, the psychological variables anxiety and depression, as assessed by the FIQ, did not relate to FM pain.

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SAT0134 PATIENT PERCEIVED BENEFITS AND SIDE EFFECTS OF THERAPEUTIC INTERVENTIONS IN FIBROMYALGIA

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Background The efficacy of treatment programs in fibromyalgia (FM) as currently used in practice is unsatisfactory and more innovative and effective therapies need to be developed.

Objectives The present study comprises part of an audit of a rheumatology clinic in which central sensitisation and neuroendocrine deficiencies were considered in the evaluation and management of FM.

Methods Forty two consecutive female FM (22 primary; 20 sary) patients, who had been followed up for at least 2 months,

were enrolled. Their mean (SD, range) age was 42 (12, 15–78), disease duration 8 (11, 0.3–45) and follow up duration 2.9 (2.2, 0.28–8.6) years, respectively. Patients completed Fibromyalgia Impact Questionnaires (FIQ) and reported on the benefits and side effects of each intervention. Results were expressed as mean (SD) where appropriate.

Results The total FIQ improved from 74.1 (11.9) to 21.6 (13.2) ($p < 0.001$). N users and % patients of users benefiting, experiencing side effects and discontinuing treatment for the different interventions were: (1) dehydroepiandrosterone: 33, 97, 6, 6; (2) IM methylprednisolone (120 mg): 33, 91, 9, 21 (duration of benefit: 2.4 (2.6), range 0–13 months); (3) exercise: 30, 100, 3, 0; (4) diet: 30, 100, 0, 0; (5) NSAID: 26, 69, 31, 50; (6) hydrocortisone: 26, 73, 35, 31; (7) clonazepam: 19, 89, 11, 21; (8) clonidine: 18, 90, 0, 22; (9) tri/tetracyclics: 18, 89, 44, 39; (10) trazodone: 16, 87, 25, 13; (11) subcutaneous sterile water: 16, 87, 0, N/A (duration of benefit: 2.5 (3.1), range 0–12 months); (12) pemoline: 14, 64, 21, 71; (13) fludrocortisone: 13, 85, 8, 38; (14) chloroquine (in secondary fibromyalgia only): 12, 100, 0, 8. More detailed results will be presented. Each FIQ score improved more in secondary as compared to primary FM and these differences reached significance for tiredness and morning tiredness ($p < 0.04$). After controlling for the use of chloroquine, the respective differences disappeared.

Conclusion Although none of our patients were involved in disability claims and only 4 (10%) were not working because of their disease, our results suggest that an individualised and multimodal management approach is associated with a marked improvement in health status in FM. Also, the potential role of chloroquine in primary FM deserves evaluation.

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SAT0135 ASSOCIATION BETWEEN HEPATITIS C VIRUS ANTIBODY, HEPATITIS B VIRUS ANTIGEN AND FIBROMYALGIA

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Background Although Hepatitis B virus and hepatitis C virus infections have been associated with several autoantibodies, the relationship between HCV, HBV infections and autoimmune response and autoimmune diseases remains unknown. In the literature there are susceptible results related to antibody positivity against HCV and antigen positivity HBV in cases with fibromyalgia syndrome and rheumatoid arthritis.

Objectives The objective was to determine whether there might be association between HBs-Ag, anti-HCV and fibromyalgia.

Methods We determined the prevalence of Anti-HCV, in 51 fibromyalgia patients, in comparison 35 rheumatoid arthritis patients from the Dicle University Hospital.

Results Among 51 patients with fibromyalgia, we detected 10 patients (19.6%) with HBs-Ag and 1 (1.96%) anti-HCV antibody, whereas we found no HBs-Ag and anti-HCV antibody among in all of the rheumatoid arthritis cases. We found statistically significant difference when we compared the HBs-Ag positivity established in fibromyalgia cases with those in healthy blood donors (which is found to be 4.87% in our region) and cases with rheumatoid arthritis ($p < 0.05$). Also, there was not any difference in terms of anti-HCV antibody positivity between

the fibromyalgia and rheumatoid arthritis, healthy blood donors ($p > 0.05$).

Conclusion In conclusion, our study suggest that there may exist an association between fibromyalgia and HBs-Ag. In addition, our data do not support the hypothesis that HCV infection may play a role in the pathogenesis of fibromyalgia.

SAT0136 CHEST EXPANSION AND SPIROMETRIC MEASURES IN PATIENTS WITH PRIMARY FIBROMYALGIA

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Background Despite normal spirometric values patients with fibromyalgia had lower values of maximum inspiratory (MIP) and expiratory pressures (MEP) than matched healthy controls. Values of MIP and MEP reflect respiratory muscle strength, therefore low values have been explained by respiratory muscle weakness or dysfunction.

Objectives This study proposed to assess the relationship of chest expansion with maximal inspiratory (MIP) and expiratory pressures (MEP) in primary fibromyalgia (FM) syndrome.

Methods Thirty female patients, aged 22–52, who met the 1990 ACR [1] criteria for the classification of FM were examined and compared with 29 healthy, age and BMI matched female subjects (aged 24–50). Pulmonary function tests were assessed by a computerised spirometer. The maximum respiratory pressures were carried out by using a digital mouth-pressuremeter. Chest expansion measurements, spirometric values, MIP and MEP values of patients with primary FM have been compared with controls.

Results Patients with FM had lower chest expansion, MEP and MIP values with respect to the controls. Chest expansion correlated significantly with MIP and MEP values. There was no significant difference among groups in spirometric values.

Conclusion Our results indicate that patients with FM have impaired respiratory muscle strength and measurement of chest expansion may be an appropriate and practical method for evaluating respiratory muscle strength in patients with FM.

SAT0137 LONG-TERM OBSERVATION OF FIBROMYALGIA PATIENTS

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Background

Objectives The objective of the study was to evaluate the natural course of fibromyalgia syndrome (FS) and to reveal if FS was not only the mask of another somatic disease.

Methods A questionnaire concerning the present health state was sent to 177 patients with FS diagnosed between 1991 and 1997. One hundred fifteen answers were received. Thirty three patients (28,7%) had no pain. In 19 (16,5%) cases the same intensity of pain and other subjective symptoms were noted. Majority of patients- 63 (54,8%) assessed their complaints as more intensive. Clinical and basic laboratory examinations were performed in 86 FS women, aged 39–70. They were asked about their present pain status, other complaints, mental status and their understanding of the matter of FS. Moreover, in all

cases the FIQ answers were obtained. In some cases additional tests were performed (X-rays, Schirmer's test, ANA, RF).

Results At examination only 5 patients (5,8%) had no pain in musculoskeletal system and felt very well; in the remaining 81 patients the features of active FS were noted. 43 patients (50%) described the pain as "awful" and "terrible", in 32 cases (37,2%) the pain was great or even insufferable. Less than 11 tender points (TPs) in 11 patients (12,8%), however in these patients other manifestations of FS were present (sleep disturbances, fatigue, ancillary symptoms). In the remaining 70 patients all ACR criteria for diagnosis of FS were still present.

Four patients (4,7%) fulfilled criteria for diagnosis of Sjögren's Syndrome (SS); ocular and oral dryness appeared later than widespread pain. There were no features of other connective tissue diseases in the remaining 82 patients. At examination other musculoskeletal disorders were observed in some cases: gonarthrosis (4 patients- 4,7%), coxarthrosis (6 patients- 7%), carpal tunnel syndrome (21 patients- 24,4%), enthesopathy (15 patients- 17,4%). The majority of FS patients (61- 70,9%) still felt suspicion of severe somatic disease and were anxious about the future; 44 patients (51,2%) believed, that careful hospital examination is necessary.

Conclusion FS remains active in most patients several years after the first diagnosis. The majority of patients feel poor or even worse, the remission of FS is uncommonly achieved and the results of treatment are still unsatisfactory. No serious chronic diseases were observed in those patients. The results confirm the high usefulness of ACR 1990 FS criteria in everyday clinical practice. In a few cases FS can be associated with subclinical course of SS.

SAT0138 SELF-REPORTED PAIN AND SLEEP QUALITY IN PATIENTS WITH FIBROMYALGIA

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Background Chronic widespread pain and sleep disturbance are among the most common symptoms reported by patients with fibromyalgia (FM).

Objectives This study assessed the level of pain and sleep disturbance in FM patients using a daily pain and sleep quality diary, the Short-Form McGill Pain Questionnaire (SF-MPQ), and the Manual Tender Point Survey (MTPS).

Methods Patients recorded their levels of pain severity and sleep quality for approximately 7 days using an 11-point numerical rating scale (ranging from 0 = no pain/best possible sleep to 10 = worst possible pain/sleep, respectively). The SF-MPQ measured pain quality and severity (range 0–3) with 11 sensory and 4 affective descriptors, and pain severity using a 100 mm visual analogue scale (VAS). The MTPS assessed the presence of pain at each of 18 tender points corresponding to those specified by the American College of Rheumatology (ACR) 1990, and 3 control points. Patients rated the severity of pain upon palpation of each of the tender and control points on a 0–10 point scale (Tender Point Pain Intensity Score). These measures were administered to 529 patients diagnosed with FM using the ACR criteria during the baseline period of a clinical drug trial. The mean age was 48.6 years, 91.5% were female, and the mean duration of FM was 107.7 months.