Fibromyalgia in people with more than 65 years, is in our group very low. This result can be real or because from the primary care this pathology in this group of people is not considered so important as others.

OP0079 PAIN, PSYCHOLOGICAL STATUS, SLEEP DISTURBANCE, AND SERUM CONCENTRATION OF 5-HYDROXYTRYPTAMINE IN PATIENTS WITH PRIMARY FIBROMYALGIA AND CHRONIC LOW BACK PAIN – A COMPARATIVE STUDY

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Background Several reports suggest that, in most cases, fibromyalgia syndrome (FS) begins as a localised pain syndrome which may precede for months or years the development of the full-blown disease. Thus, some patients who currently present with chronic low back pain (LBP) may in future develop FS.

Objectives To study FS signs and symptoms and serum serotonin (5-hydroxytryptamine, 5-HT) in patients with chronic low back pain syndrome (LBP) in order to identify possible predictors of FS development.

Methods Comparative and correlation analysis of clinical data (pain intensity, tender point count, average pain threshold, functional symptoms, levels of depression and anxiety, feeling of well-being, measures of sleep disturbance) and serum 5-HT in patients with FS (n = 34) and LBP (n = 46).

Results FS patients had higher intensity of pain, higher tender point count, lower average pain threshold, more functional symptoms, higher scores on depression and anxiety scales, decreased feeling of well-being, and more sleep troubles than those with LBP ($p < 0.0001$ for all comparisons). In both groups, there was a strong interrelationship between functional symptoms, depression, anxiety, feeling of well-being, and the sleep disturbance. Serum 5-HT was lower in FS group when compared to healthy sex- and age-matched controls (n = 26, $p < 0.03$). Although low serum 5-HT was found in some patients with LBP, the median serum level of the monoamine did not differ significantly from that found in FS and controls. There was no relationship between serum 5-HT and the clinical characteristics in the LBP group. Women with LBP had higher count of tender points ($p < 0.0001$), lower pain threshold ($p < 0.0001$), higher median level of depression ($p < 0.005$), and more disturbed sleep ($p < 0.05$) than men.

Conclusion As expected, striking differences in clinical characteristics were found between FS and LBP with greater disturbance seen with the FS group. Our study confirms earlier reports suggesting lowered serum 5-HT in FS and provide no support to the hypothesis that there may be a general 5-HT deficiency in LBP. Higher tender point count, decreased pain threshold, depression, and sleep disturbance are possible predictors of FS development in LBP and should be investigated in further prospective research.

OP0081 THE EFFECTIVENESS OF AEROBIC EXERCISE AND EDUCATION IN FIBROMYALGIA SYNDROME

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Background Fibromyalgia is a common syndrome found predominantly in women. It is characterised by chronic, diffuse, musculoskeletal pain and a sleep disorder, without evidence of arthritis or myositis.

Objectives The purpose of this study was to compare the effectiveness of aerobic exercise and education with the control group in fibromyalgia syndrome and to evaluate the patients treated with this method after the treatment program.

Methods Sixty women, aged 18–55 years, diagnosed as fibromyalgia according to 1990 ACR criteria were randomly divided into two groups. Group I was given aerobic exercise and stretching exercise for 8 weeks following an education program. Group II was the control group. Both groups took sertraline 50 mg/day. The patients were evaluated before and after the treatment. We used VAS, number of tender points, total myalgic score for pain, Beck depression inventory (BDI) for depression, Patient and doctor global assessment scale, Fibromyalgia attitudes index (FAI) for global assessment, Fibromyalgia impact questionnaire (FIQ), Health assessment questionnaire (HAQ) for functional evaluation, Astrand test for aerobic capacity.

Results The results of VAS, number of tender points, total myalgic score, BDI, FAI, FIQ, HAQ and patient and doctor global assessment scale showed significant improvement in both groups ($p < 0.001$, $p < 0.01$). In the first group, the results of VO₂max showed significant improvement ($p < 0.001$). The results of some groups of FIQ, SELF function subscale, FAI and BDI were not statistically different among the two groups ($p > 0.05$). We found significant improvement in other parameters in exercise group than the control group.

Conclusion Fibromyalgia is a multifactorial syndrome, and the best treatment will encompass multiple strategies, that include education, stress management treatment and aerobic exercise.

OP0082 CENTRAL SENSITISATION AND CLINICAL PAIN SEVERITY IN CYP2D6 PHENOTYPED FIBROMYALGIA (FM) PATIENTS

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Background Nociceptive processing in fibromyalgia (FM) patients could be altered by aberrant central mechanisms.

Objectives R-III nociceptive reflex can be used to assess nociceptive processing and to provide indirect evidence of central pain sensitisation.

Methods 95 of 150 FM included in an ongoing RCT of an exercise program vs 40 matched controls (C) were evaluated. Pain severity was assessed by number of tender points (TP), myalgic score (MS) and physician global impression (PGI). Patient's ratings included a VAS and the regional pain score (RPS). FM and C were assessed by central (R-III) and peripheral (thermotests) quantitative sensory testing (QST). QST and clinical parameters were correlated to CYP2D6 phenotypes.

Results Nearly all FM were female (98%); main reason for exclusion was the inability to interrupt drugs with analgesic properties for >10 days. Age [FM mean 49(SEM1) vs C 46(2) y.], gender and socio-demographic characteristics were similar in both groups. Mean duration of symptoms was 8 y (range 0.4–49). RPS was 64(13–98), VAS was 5.7 (SD 2). Means for clinical examination were: TP 16(0.3), MS 29(0.9) and PGI 2.7(0.1). R-III reflex threshold was reduced in FM [26(2) vs 38(2) mA, $p < 0.01$]. Thermal perceptions (hot and cold) were similar in both groups, whereas thermal pain thresholds and latency (hot, cold, and cold pressure test) were drastically decreased in FM ($p < 0.001$). Correlation analysis showed a significant relationship between PGI, and central QST (Pearson $r = -0.28$; $p = 0.02$) and between PGI, MS and TP ($r = 0.34$ and $r = 0.66$, respectively $p < 0.01$). Correlation with CYP2D6 activity is under analysis.

Conclusion Physician global impression, but not the other clinical scores, correlates with the extent of central sensitisation. Supported by the SNSF (3200–056028.98).

SAT0131 INTERNAL IMAGE OF ILLNESS IN FIBROMYALGIA AND SYSTEMIC LUPUS ERYTHEMATOSUS

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Background The disturbances of the system of personality's attitudes and psychological specificity of the disease perception reflect in the patient's behaviour that plays an important role in therapy and rehabilitation.

Objectives The aim of present study was to investigate some elements of internal image of illness, including some aspects of psychological status in patients with fibromyalgia (FM) and systemic lupus erythematosus (SLE).

Methods Using a battery of psychological tests, we determined the level of neurotic disturbances, the level of subjective control (Health Locus of Control), the type of attitude towards illness (TOBOL) and the intensity of basic mechanisms of psychological defence (Life Style Index) in 32 patients with FM and 55 patients with SLE.

Results The results of our study are the evidence of considerable expressed anxiety and asthenia, low scores on general internality and internality concerning health and illness scales in FM and SSc patients.

The structure of internal image of illness represented by sensitive and ergopathic types in FM patients, and sensitive, ergopathic, hypochondriac and neurasthenic types of attitudes towards illness in SLE patients. We revealed a narrow spectrum of intense psychological defence: ?jet formation?, ?projection?, and ?regression? in FM patients, and ?jet formation?, ?projection?, and ?intellectualisation? in SLE patients.

A reliable differences were founded between FM and SLE patients: depression was more expressed in SLE than in FM patients ($p < 0,05$), the index of internality concerning health and illness was higher in FM than in SLE patients ($p < 0,05$). Besides, the anxious and sensitive types of reacting towards illness are more frequent in FM than in SLE patients ($p < 0,05$).

Conclusion The data we obtained indicate the development of substantial neurotic disturbances in FM and SLE patients. The decrease of subjective control's level, especially in SLE patients are the evidence that these patients may be particularly likely to

develop the belief that their disease is beyond their effective control. These patients, therefore, perceive that they will not be able to reduce substantially the pain, disabilities, or other sequel of the disease. It may lead to maladaptive behaviour such as nonadherence to treatment regimens, reliance upon ?quack? cures, and excessive use of medicines.

The mixed type of attitudes towards illness that we diagnosed in FM and especially in SLE patients indicate the discrepant nature of the structure of personal attitudes related to the disease. An essential pressure and prevalence of founded types of psychological defence indicate to narrowing of adaptive abilities of FM and SLE patients.

The results of research we carried out may be useful to correct nonadaptive attitudes of patients towards the disease in good time, to use psychological interventions in order to increase the efficiency of the therapy and to optimise rehabilitation.

SAT0132 VALIDATION OF THE 'QUALITY OF LIFE SCALE' (QOLS-G) IN PATIENTS WITH FIBROMYALGIA

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Background The Quality of Life Scale (QOLS) is a 16 item questionnaire. The QOLS covers a broader perspective of quality of life as it is seen by patients with rheumatic diseases including non-health factors as satisfying relationships with others, material well being, self-fulfilment and leisure activities.

Objectives Our objective was to translate the QOLS into German and to evaluate its reliability and validity for the use of German speaking patients with fibromyalgia (FM).

Methods We administered the QOLS to 57 FM patients meeting the ACR criteria (14 patients filled out the questionnaire 1 week later) together with German versions of the FIQ, the SF-36 and a tender point count (TPC). All patients were asked about the severity of pain today (VAS) and the duration of symptoms; pressure pain thresholds (PPT) were assessed by dolorimetry at all tender points with a Fisher Dolorimeter and laboratory tests were obtained. Test-retest reliability was assessed using Spearman correlations. Internal consistency was evaluated with Cronbach's alpha of reliability. Construct validity of the QOLS was evaluated by correlating the QOLS with the FIQ and the SF-36 scores as well as with the pain variables and dolorimetry scores.

Results Age range was 33–73 years (mean 53,8). Means were for the TPC (maximal achievable score 120) 67, for pain today 6,8 and for duration of symptoms 11,8 years; the mean tenderness threshold was 1,49 kg/cm². Test-retest reliability was for the total QOLS 0,76. Internal consistency was 0,88. As hypothesised, low to moderate correlations (rho) were obtained between the QOLS and the total FIQ (-0,29), the SF-36 (e.g. physical component 0,19, mental component -0,17) as well as the pain variables (VAS -0,18, TPC -0,01) and PPT (0,12).

Conclusion The QOLS-G is a reliable and valid instrument for measuring quality of life in German patients with FM.