second stage of rehabilitation was supported by thermo-massotherapy. The results were superior to the first stage, the improvement of the clinical parameters was over 83,4%.

The third therapeutic stage was applied 3–6 months later, after a new consultation. We used the same kinetic programme of strengthening- co-ordination exercises daily, for another two weeks, thermo-massotherapy supported.

The improvement after the third stage of the kinetic programme was superior, clinical parameters increased over 90% confronted with initial values.

Conclusion We prove the necessity of an unitary score of valuation and the efficiency of a staggered kinetic programme in the complex rehabilitation of the algo-functional muscular-ligamentar cervical syndromes, as the only efficient therapeutic alternative in the functional deficiencies? compensation and for prevention of complications.

AB0167 EFFICIENCY OF REHABILITATION IN THE OLD PATIENTS PERIARTHRITIS

EL Sidenco. *Rehabilitation, University Hospital Bucharest, Bucharest, Romania*

10.1136/annrheumdis-2001.584

Background

Objectives We studied a group of 40 old patients with soft tissues sufferings (periartthritis) at the shoulder or hip. Patients accused pain and limited mobility, and at the clinical examination we found muscular hypotrophy and limitation of function in the shoulder or hip.

Methods We applied an associated kinetic programme of stretching-strengthening- control and co-ordination exercises in two different periods of 15 days, supported by electro-thermo-massotherapy. The valuations were made at the beginning and the end of the programme, on a clinical score of valuation obtained by the clinical parameters; the results were statistically processing.

Results We find from the beginning a large incidence of the periartthritis at the old patients (25,37%) and the preference for the women, larger in comparison with other ages (27 cases from the group of 40).

Application of the kinetic programme, physically supported, significantly improved the pain (completely for the spontaneous and nocturnal pain, and over 70% for the pain at the motion). Limitation of mobility increased over 63,6%, even the functional remaining is limited at the old patient and the real possibilities of the kinetic programme display can be limited by the associated pathologies. Muscular hypotrophy had a medium response (improvement under 33,7%), because of the limited biological capital and also the associated pathologies which imposed the adaptation of the kinetic programme to the real effort's possibilities. Global function of the upper limb increased over 77,5%.

Conclusion We consider the soft tissues sufferings of the old patient indicated for the kinetic programme, adequately supported by physical proceedings; the associated cardiovascular diseases do not forbid the rehabilitation, kinetic programme specially, if the patients are well medically treated and the kinetic programme is well adapted at the real effort's possibilities of the patients.

AB0168 PSYCHOPATHOLOGIC STUDY IN PATIENTS WITH FIBROMYALGIA

¹AR De la Serna, ²M Serra, ²J Wulf. ¹Rheumatology (1)/Psychosomatic (2); ²Psychosomatic, Sant Pau, Barcelona, Spain

10.1136/annrheumdis-2001.585

Background Fibromyalgia is considered a psychosomatic disease.

Objectives This study was conducted to assess psychopathology changes in patients with fibromyalgia.

Methods We evaluated sequential outpatients with ACR criteria of fibromyalgia, through interviews by clinical psychologist, a psychiatrist and test for general psychopathology (Golberg), depression (Beck) and anxiety (Stai).

Results Demographic data: Twenty-nine patients were evaluated (4 men). Twenty-seven were married. Eighteen were immigrants. Twenty-four had children. Eight were unemployed. Thirteen were house wives. Three non qualified professionals. Eleven retailers and two qualified professionals. Psychopathologic results: Eight patients were totally normal. Golberg'test: twelve patients were normal. Five had mild and twelve severe alterations. Beck'test: thirteen patients were normal. Four suffered from mild depression. Four moderate, four severe and four more severe depression. Stai'test: ten patients didnt anxiety. Eighteen were trait anxiety and sixteen state anxiety. Interview: nineteen patients had sleep problems. Twenty-four were fatigued and fifteen had relapse thinking.

Conclusion The absence of psychopathology in 28% of patients with fibromyalgia, and the mild changes in others, allows us to differentiate between psychogenic rheumatism and fibromyalgia, and obligues us to establish a psychogenic evaluation in these.

AB0169 FIBROMYALGIA. GERIATRICS PROBLEM?

A Laiz, H Corominas, M Peiró, S Fernández, C Díaz, G Vázquez. *Internal Medicine, Hospital de La Santa Creu I Sant Pau, Barcelona, Spain*

10.1136/annrheumdis-2001.586

Background

Objectives To study in a group of patients, of a rheumatology unit in primary care the presence of fibromyalgia and tocompare the results between those with more and less than 65 years.

Methods From a rheumatology unit in primary care, in Barcelona, during one year, we selected the patients with fibromyalgia.

The diagnostic was done according with ACR criteria 1990.

Statistical method used for comparisons was the chi- square test and correction of continuidad.

Results Visits performed were 1555. The mean was 61 ± 15 (Table 1).

Between them ($p < 0.05$).

Abstract AB0169 Table 1

	Less than 65	Equal or more than 65	Total
Without fibromyalgia	777	660	1437
With fibromyalgia	93	25	118
Total	870	685	1555

Conclusion The prevalence of fibromyalgia is similar to others studies.

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

¹PZ Hrycaj, ²B Hauns, ²K Ovenhausen, ²P Mennet, ²W Müller. ¹Department of Rheumatology and Clinical Immunology, Karol Marcinkowski University School of Medical Sciences, Poznan, Poland; ²Department Für Die Grundlagenforschung in Der Rheumatologie, Hochrhein-Institut Für Rehabilitationsforschung E. V., Bad Säckingen, Germany

10.1136/annrheumdis-2001.587

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

O Kuru, N Yildiz, A Bilgici. *Physical Medicine and Rehabilitation, Ondokuz Mayıs University Medical Faculty, Samsun, Turkey*

10.1136/annrheumdis-2001.588

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

¹JA Desmeules, ²C Cedraschi, ²E Baumgartner, ²A Finckh, ³P Cohen, ¹P Dayer, ²TL Vischer. ¹Clinical Pharmacology and Toxicology; ²Rheumatology; ³Reeducation Clinic, Geneva University Hospitals, Geneva, Switzerland

10.1136/annrheumdis-2001.589

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.