Methods: 192 patients with BMES secondary to osteoarthritis localized to knee, hip, wrist or foot were randomly assigned to I.V. infusion of 100mg neridronate given four times over 10 days (Group A, 72 subjects) or alternatively to I.V. infusions of 100mg every 21 days over 3 months (Group B, 120 subjects). At baseline and after 180 days we performed an MRI. We assessed a 0-100mm pain VAS in each patient, too. Outcomes were to evaluate the MRI changes and the VAS changes. A control group (35 patients) was enrolled too, treated conservatively with NSAIDs and articular rest.

Results: we observed a significant improvement in MRI with the resolution of bone marrow lesions present at the baseline ($p<0.01$), without a significant difference between Group A and Group B. Visual analogue scale (VAS) score decreased significantly during the study in both groups ($p<0.05$) without a significant difference between the two treatment groups ($p>0.1$). Both groups showed a significant clinical and radiologic improvement compared with control group ($p<0.001$).

Conclusion: In patients with BMES, the infusions of neridronate 100mg every 21 days over 3 months or alternately every 3 days over 10 days are associated with clinically relevant and persistent benefits without significant differences between the two treatment-schedules. These results provide conclusive evidence that the use of bisphosphonates, at appropriate doses, is the treatment of choice BMES.

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THU0464

USE OF BENZODIAZEPINES AND ANTIDEPRESSANTS IN PATIENTS WHO ATTEND A RHEUMATOLOGY CLINIC

M. P. Martínez-Vidal¹, A. Alvarez de Cienfuegos², V. Jovan³, R. Martín-Domech⁴, M. T. Pedraz-Penalva⁴, P. Bernabéu³, J. R. Noguera-Pons⁵.

¹Hospital Universitario San Juan de Alicante, Alicante, Spain; ²Hospital Vega Baja, Orihuela, Spain; ³Hospital General Universitario de Alicante, Alicante, Spain; ⁴Hospital General Universitario de Elda, Elda, Spain; ⁵Hospital General Universitario de Elche, Elche, Spain

Background: During the last decades, anxiolytics and antidepressants (ADP) have been among the most prescribed therapies in all developed countries (1). In Spain a prevalence of use of 11.4% was communicated (2), slightly over the European average (3,4). They have potential addiction problems and side effects. **Objectives:** The objective of this study was to evaluate the prevalence of anxiolytics and antidepressants among patients who attend a Rheumatology consult, as well as the indication for them.

Methods: Patients who were referred for the first time to the Rheumatology consult were included. Demographical data, reason for referral and final diagnosis were recorded. Regarding the treatment with ADP or/and benzodiazepines (BDZ), their duration and the indication for the prescription were recorded. Sample size was estimated for a 0.05% alpha risk. Descriptive, univariate and multivariate analyses (ANOVA) were performed in order to study the prevalence of these treatments, and their associations with demographical or clinical characteristics. The study was approved by the Hospital Universitario de Elche Ethics Committee.

Results: 350 patients were included (women 77.1%, men 22.9%), mean age 58.1 yo. 40% were occupied and 31.4% were unemployed. The majority were married or lived with a couple (71.4%). Most of them had been referred for musculoskeletal pain (73.4%). More than a third (39.4%) were on BDZ and/or ADP: 107 patients were on BDZ (30.6%), 68 were on ADP (19.4%), and 47 (13.4%) were on both. The most frequent reasons for their prescription were anxiety, depression and insomnia. The final diagnosis in the clinic was a non-inflammatory condition in 53.1%, and inflammatory in 18%. In the univariate analyses, the use of BDZ/ADP was not associated with civil status, but it was associated with female sex ($p<0.001$), unemployment ($p<0.001$) and non-inflammatory final diagnosis ($p<0.001$). In the multivariate analyses, the use of BDZ and/or ADP was associated with female sex ($p=0.002$ [RR 3.4, CI 95% 1.6-7.4]) and non-inflammatory final diagnosis, specifically fibromyalgia ($p=0.007$ [RR 16.1, CI 95% 2.2-120.7]).

Conclusion: The use of anxiolytics and antidepressants is frequent in the patients referred to the Rheumatology clinic, and it's associated to female sex and non-inflammatory conditions, over all fibromyalgia.

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THU0465

SERUM LEVEL OF ADRENOCORTICOTROPHIC HORMONE IS A CONTRIBUTING HORMONE OF METABOLIC SYNDROME IN NEWLY DIAGNOSED FIBROMYALGIA

T. Merza Mohammad¹, M. Alnimer². ¹Hawler Medical University, College of Pharmacy, Erbil, Iraq; ²Ja'afar Sadiq University, Bagdad, Iraq, Baghdad, Iraq

Background: Evidence of components of metabolic syndrome including. Obesity dyslipidemia, abnormal glucose tolerance rate and hypertension are associated with fibromyalgia. Adrenocorticotrophic hormone (ACTH) is reported to be significantly higher in fibromyalgia patients, and it causes obesity, high blood pressure.

Objectives: This study aimed to assess the serum level of ACTH as a contributing as well as a discriminator hormone in newly diagnosed fibromyalgia women presented with variable components of metabolic syndrome.

Methods: This cross-sectional study comprised 100 women with newly diagnosis fibromyalgia and 30 apparent healthy women served as control from Kurdistan region-Iraq. Clinical data including the score of fibromyalgia impact questionnaire-revised (FIQR), tender point, body mass index, waist circumference, blood pressure and fasting serum levels of glucose and lipid profile, and ACTH level. The score of metabolic syndrome was calculated using the formula:

$$\frac{2 \times \text{waist}}{\text{height}} + \frac{\text{serum glucose}}{5.6} + \frac{\text{Serum triglyceride}}{1.7} + \frac{\text{Systolic blood pressure}}{130} - \frac{\text{serum high density lipoprotein}}{1.02 \text{ or } 1.28 \text{ (male or female)}}$$

Results: Compared to the controls, the Fibromyalgia women displayed significantly higher values of waist circumference ($88.9 \pm 5.7\text{cm}$ versus $87.1 \pm 2.7\text{cm}$, $p=0.019$), systolic blood pressure ($136.1 \pm 13.5\text{mmHg}$ versus 131.4 ± 7.1 , $p=0.014$), metabolic syndrome score (3.10 ± 0.25 versus 3.03 ± 0.19 , $p=0.039$), and serum ACTH levels ($16.66 \pm 3.23\text{pg/ml}$ versus $14.42 \pm 2.18\text{pg/ml}$, $p<0.001$). Serum ACTH levels significantly and inversely correlated with the total score of the FIQR ($r = -0.320$, $p=0.001$) and number of tender points ($r = -0.374$, $p<0.001$). Metabolic syndrome score is significantly and inversely correlated with the total FIQR score ($r = -0.296$, $p=0.003$). Multivariable regression analysis using showed that serum level of ACTH is a significant ($p=0.007$) predictor of 19.7% of fibromyalgia patients (Figure 1), and it is a significant ($p=0.007$) discriminator of tender points as the area under the curve is $0.325_{95\%}$ C.I.: $0.212-0.438$) (Figure 2).

Figure 2. serum level of ACTH (cutoff level $\geq 14.5\text{pg/ml}$, sensitivity=72%, specificity=50%) as a discriminator of the tender points (AUC $_{95\%}$ C.I.: $0.325[0.212-0.438]$, $p=0.007$), score of

fibromyalgia symptoms (AUC_{95% CI}: 0.474[0.313-0.581], $p=0.409$), and metabolic syndrome score (AUC_{95% CI}: 0.546[0.423-0.668], $p=0.480$)

Conclusion: Fibromyalgia women responded to the stress of pain by increasing the serum level of ACTH which effectively improves the clinical feature of fibromyalgia symptoms, but at the same time elevates the score of metabolic syndrome. Therefore, assessment of serum level of ACTH can serve as a predictor and discriminator of fibromyalgia comorbidity.

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THU0466

EARLY DIAGNOSIS IS ASSOCIATED WITH LESS DISEASE SEVERITY AND BETTER OUTCOME IN FIBROMYALGIA SYNDROME: A TRICENTRIC PROSPECTIVE ANALYSIS OF A COHORT OF 370 PATIENTS

A. Moshirif¹, W. Gouda², M. H. Abu-Zaid³. ¹Al Azhar University, Assiut, Egypt; ²Aswan University, Aswan, Egypt; ³Tanta University, Tanta, Egypt

Background: Delayed diagnosis of fibromyalgia (FM) has been reported to be associated with more economic burden, healthcare utilization and worse response to treatment^{1,2}. However, its impact on the patients' symptomatology and disease severity is still underestimated.

Objectives: to evaluate the effect of diagnostic delay (DD) on FM severity and disease assessment parameters.

Methods: in this cross sectional study, 370 FM patients were prospectively interviewed. Information about DD, widespread pain index (WPI), symptom severity scale (SSS), total severity scale (SSS+WPI) and number of tender points were collected. We proposed to classify our patients into 3 categories; early diagnosis (ED ≤ 2 years; 83 patients), late diagnosis (LD: $>2-7$ years; 198) and very late diagnosis (VLD >7 years; 89 patients).

Results: the mean age of patients was 33.9 (± 9.8) and 79.4 % were female. The mean for DD was 5.6 (± 3.6) while the means for SSS, total scale and tender points were 7.8 (± 1.6), 16.46 (± 4.1), 14.31 (± 2.3) respectively. A significant correlation has been found for DD with SSS ($r = 0.14$), total scale ($r = 0.37$) and tender points ($r = 0.16$) but not with WPI ($r = 0.059$).

Comparing the three categories, the mean for SSS was 7.54 (± 1.6), 7.73 (± 1.4) and 8.25 (± 1.7) in the groups of ED, LD and VLD respectively ($P = 0.008$) while the mean for the total scale was 15 (± 3.8), 15.95 (± 3.8) and 18.96 (± 4.4) respectively ($P = 0.000$) and the mean for tender points was 13.7 (± 2.3), 14.35 (± 2.1) and 14.77 (± 2.8) respectively ($P = 0.011$). The mean for WPI did not significantly differ as it was 7.45 (± 2.8), 7.8 (± 3.6) and 7.18 (± 4.8) in the groups of ED, LD and VLD respectively ($P = 0.415$).

Conclusion: early diagnosis of FM is associated with low SSS, total severity scale and tender points reflecting a better outcome and a less disease severity.

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THU0467

CONCEPTS AND PERCEPTIONS ABOUT FIBROMYALGIA DIAGNOSIS, MONITORING AND TREATMENT AMONG COLOMBIAN RHEUMATOLOGISTS, PHYSIATRIST AND PAIN PHYSICIAN

D. G. Fernández-Ávila¹, D. Rincón-Riaño², J. Gutiérrez¹. ¹Rheumatology Unit, Department of Internal Medicine, Hospital Universitario San Ignacio - School of Medicine, Pontificia Universidad Javeriana. Bogotá, Colombia, Bogotá,

Colombia; ²Rheumatology Service, Hospital Militar Central - Universidad Militar Nueva Granada. Bogotá, Colombia, Bogota, Colombia

Background: Fibromyalgia is a chronic disease characterized by the presence of widespread and persistent musculoskeletal pain associated with a variety of symptoms. The concepts and perceptions around diagnosis and treatment of fibromyalgia among physicians are not objectively known. The purpose of this study is to obtain objective data through a survey and describe the concepts and perceptions about the diagnosis, treatment and treatment of fibromyalgia among colombian rheumatologists, physiatrist and pain physicians

Objectives: The main purpose of this study is to obtain objective data on this subject and describe the concepts and perceptions about the diagnosis, treatment and monitoring of FM among colombian rheumatologists, physiatrist and pain physicians.

Methods: Cross-sectional study. Through a focus group in which two rheumatologists and one expert in qualitative research methods participated, a survey was designed to evaluate the perceptions and concepts that rheumatologists, physiatrist and pain physicians have on the diagnosis and treatment of fibromyalgia. The survey was self-applied anonymously through the internet.

Results: Survey applied to 139 rheumatologists, 99 physiatrist and 81 pain physicians. 35 rheumatologists (25.2 %), 17 physiatrist (17.1 %) and 58 pain physicians (71.6 %) consider that there is not enough evidence to recognize fibromyalgia as a disease. 45 rheumatologists (32.4 %), 86 physiatrist (86 %) and 73 pain physicians (90.1 %) consider that the 1990 ACR (American college of Rheumatology) criteria are not sufficient to diagnose fibromyalgia, despite the fact more than 90% of them use the criteria as a tool to approach the diagnosis when suspecting fibromyalgia. The most formulated medications for managing fibromyalgia are antidepressants and is used by more than 80% of the respondents, followed by antiepileptics in pain physician (88.9%) but less than physiatrists and rheumatologists (66.6 % and 64.7 % respectively), and analgesic much more for pain physician and physiatry and less for rheumatologists (84 %, 75.7 % and 26.6 % respectively). All respondents consider that the patient with fibromyalgia should have a multidisciplinary approach. Most doctors of the three specialties believe that physiatrist should be the leaders of interdisciplinary management in the treatment of fibromyalgia patients.

Conclusion: We present objective information on the perceptions of fibromyalgia among a group of Colombian rheumatologists, physiatrist and pain physician, documenting a frequent use of the ACR 1990 classification criteria. As regards treatment, a high percentage use of antidepressants and antiepileptic. Most believe that physiatrist should be the leaders of interdisciplinary management in the treatment of fibromyalgia patients.

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Figure 1. Multivariable regression analysis with *posthoc* ANOVA test showed significant correlations between serum level adrenocorticotrophic hormone as a dependent variable with the score s of fibromyalgia impact questionnaire and metabolic syndrome, and the number of tender points. $R=0.443$, $F=7.777$, $P<0.001$, prediction 19.7%),