Background: Fibromyalgia is characterized by chronic widespread musculoskeletal pain that often co-exists with sleep disturbances, fatigue, cognitive dysfunction, stiffness and tenderness to palpation at specific tender points. Selective serotonin reuptake inhibitors (SSRIs) represent a class of commonly used antidepressants. They act by preventing the reuptake of 5-hydroxytryptamine (5-HT) (Serotonin) through the inhibition of the 5-HT transporter (5-HTT) which is located on the presynaptic neuron, thereby increasing levels of 5-HT within the synaptic cleft and modulating neurotranschemical signaling. Usage of SSRIs was significantly associated with lumbar spine BMD reduction, particularly for old people. DXA and TBS revealed that usage of SSRIs and SNRI was significantly associated with low BMD (Osteopenia and osteoporosis) specially spine BMD reduction with low TBS (partially degraded and degraded) particularly for old people and despite low BMD was found in the SRI users; it also found in 1ry fibromyalgia not on SRIs so 1ry fibromyalgia should also be consid- ered as a contributing factor for low BM.

Objectives: This work aim to determine the correlation between selective serotonin reuptake inhibitors (SSRIs) and serotonin norepinephrine reuptake inhibitors (SNRIs) usage and bone mineral density (BMD) and trabecular bone score (TBS) changes in primary Fibromyalgia patient

Methods: The present cross sectional study was conducted on a Hundred (100) Egyptian patients diagnosed as primary fibromyalgia divided according to drug medication into two groups, 50 patients on SSRIs and 50patients on SNRIs, recruited from Rheumatology, Physical Medicine and Rehabilitation departments at AlHussein and Sayed Galal, Al-Azhar University Hospitals. In addition to another group: 50 patients non SRIs-users and group C-2: 25) healthy individuals. About the study procedures and a written consent was obtained from all of them. The subjects were categorized into three groups. Group A: 50 1ry fibromyalgia patients on SSRIs. Group B: 50 1ry fibromyalgia patients on SNRIs. Group C: 50 individuals as a the control group subdivided into: group C-1: 25, 1ry fibromyalgia patients non SRIs-users and group C-2: 25) healthy individuals.

Results: DXA and TBS revealed that usage of SSRIs and SNRI was significantly associated with low BMD (Osteopenia and osteoporosis) specially spine BMD reduction with low TBS (partially degraded and degraded) particularly for old people and despite low BMD was found in the SRI users; it also found in 1ry fibromyalgia not on SRIs so 1ry fibromyalgia should also be considered as a contributing factor for low BMD. Conclusion: the present study provided evidence that usage of SSRIs or SNRI was significantly associated with low BMD (Osteopenia and osteoporosis) particularly for old people and despite low BMD was found in the SRI users; it also found in 1ry fibromyalgia not on SRIs so 1ry fibromyalgia should also be consid- ered as a contributing factor for low BM.

Disclosure of Interests: None declared.

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AB0592

THE ITALIAN FIBROMYALGIA REGISTRY: A NEW WAY OF USING ROUTINE REAL-WORLD DATA CONCERNING PATIENT-REPORTED DISEASE STATUS IN HEALTHCARE RESEARCH AND CLINICAL PRACTICE

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Background: Fibromyalgia (FM), the most frequently encountered cause of widespread musculoskeletal pain, affects an estimated 2% of the general Italian population. However, it is not a homogeneous clinical entity, and a number of interacting factors can influence patient prognosis and the outcomes of standardised treatment programmes. Registries are a source of high-quality data for clinical research, but relating this information to individual patients is technically challenging.

Objectives: The aim of this article is to describe the structure and objectives of the first Italian Fibromyalgia Registry (IFR), a new web-based registry of patients with FM.

Methods: The IFR was developed to collect, store, and share information electronically entered by physicians throughout Italy who are members of the Italian Society of Rheumatology and have a particular interest in FM. It has a web-based architecture that uses two separate servers and an encryption algorithm to ensure the confidentiality and integrity of the exchanged data. The questionnaires included on the platform are the Revised Fibromyalgia Impact Questionnaire (FIQ), the modified Fibromyalgia Assessment Status (ModFAS), and the Polysymptomatic Distress Scale (PDS).

Results: The registry includes data relating to 2,339 patients (93.2% female) who had completed the questionnaire. The analysis of the data included in the registry reveals that usage of SSRIs or SNRI was significantly associated with low BMD (Osteopenia and osteoporosis) particularly for old people and despite low BMD was found in the SRI users; it also found in 1ry fibromyalgia not on SRIs so 1ry fibromyalgia should also be consid- ered as a contributing factor for low BM.

Disclosure of Interests: None declared.

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AB0592

COENZYME Q10, TRYPTOPHAN AND MAGNESIUM: A NUTRITIONAL SUPPLEMENT IN THE TREATMENT OF FIBROMYALGIA SYMPTOMS

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Background: Fibromyalgia syndrome (FMS) is a multidimensional chronic disorder characterized by widespread musculoskeletal pain, fatigue, sleep disturbances, cognitive dysfunction, depressive episodes, and anxiety [1]. Management of FMS remains challenging and treatment strategies are required to be multidisciplinary. Among nonpharmacological therapies, nutrition is a promising tool, since oxidative stress and/or an imbalance of nutritional components have demonstrated to play a critical role in the pathophysiology of FMS [2,3].

Objectives: We conducted a pilot study (FATMIA Study) to investigate the efficacy and tolerability of a dietary supplement containing Coenzyme Q10, magnesium and tryptophan in FMS patients.

Methods: This was a prospective, double-blind, placebo-controlled, two-period pilot study conducted between March 2017-October 2017. All patients underwent two 3-month treatments with NSC and placebo, with a 1-month washout period in between. To evaluate the most prevalent clinical manifestations of FMS, the Combined Index of Severity of Fibromyalgia questionnaire (ICAF) [4] was used. A sample of 23 patients aged from 18 to 80 years, with a formal diagnosis of fibromyalgia of at least two years, was included in the study.

Results: Twenty patients completed the study, while three (13.0%) dropped out because they failed to attend all clinical visits (n=2) or presented an adverse event (n=1). Participant demographics are presented in Table 1. All participants were female with a mean age of 51.9 (12) years. Depressive disorder and anxiety were reported in 65.0% (13/20) and 30.0% (6/20) of cases, respectively. All patients were under pharmacological treatment for FMS symptoms. The most commonly reported medications were paracetamol (60.0%, 12/20), selective serotonin reuptake inhibitors
(45.0%, 9/20), and tramadol (40.0%, 8/20). Physical symptoms such as fatigue, functional capacity, pain and sleep quality improved at the end of the study treat-
ment, whereas they mainly declined after placebo treatment. However, no sta-
tistically significant differences were found among the studied variables. Total ICAF
score improved after NSC treatment, and declined after placebo treatment. NSC

treatment was well tolerated, with a low incidence of adverse events (5.0%, 1/20).

Table 1. Patient demographics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, years [mean (SD)]</td>
<td>31.9 (7.2)</td>
</tr>
<tr>
<td>Sex (F/M)</td>
<td>20/0</td>
</tr>
<tr>
<td>Weight, kg [mean (SD)]</td>
<td>69.3 (13.1)</td>
</tr>
<tr>
<td>Height, cm [mean (SD)]</td>
<td>160.4 (6.5)</td>
</tr>
<tr>
<td>Years since first FMS diagnosis [mean (SD)]</td>
<td>7.7 (6.3)</td>
</tr>
<tr>
<td>Occupational status, n (%)</td>
<td></td>
</tr>
<tr>
<td>Working full-time/part-time</td>
<td>10 (50.0)</td>
</tr>
<tr>
<td>At home</td>
<td>3 (15.0)</td>
</tr>
<tr>
<td>Not working/receiving pension</td>
<td>5 (25.0)</td>
</tr>
<tr>
<td>Retired or unemployed</td>
<td>2 (10.0)</td>
</tr>
<tr>
<td>Smoking patients, n (%)</td>
<td>8 (40.0)</td>
</tr>
<tr>
<td>Patients on alcohol consumption, n (%)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Patients on physical activity, n (%)</td>
<td>2 (10.0)</td>
</tr>
<tr>
<td>F/M: female/male</td>
<td></td>
</tr>
</tbody>
</table>

Conclusion: The results of this study constitute the first investigation of the effect of a nutritional supplement containing CoQ10, magnesium and tryptophan on FMS. Although the results should be confirmed in larger studies, they suggest that NSC treatment for 3 months, in addition to pharmacological therapy, may be of interest in the management of FMS. This treatment appeared to primarily improve physical symptoms, such as fatigue and pain, with low risk of adverse events.

References:

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AB0954 IS CONNECTIVE TISSUE MASSAGE EFFECTIVE IN INDIVIDUALS WITH FIBROMYALGIA?

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Background: Fibromyalgia (FM) is a systemic rheumatic disease characterized by diffuse pain in the body, tenderness, fatigue and many more symptoms. Exercise is effective and safe method in individuals with FM. Connective tissue massage, another treatment method, is a reflex therapy where shear force is applied in a certain order at the connective tissue interfaces of the skin. In the literature, there is limited study related compared with clinical pilates exercises and connective tissue massage in individuals with FM.

Objectives: The aim of the study was to examine the effectiveness of clinical pilates exercises and connective tissue massage in individuals with Fibromyalgia on disease activity, number of painful regions, anxiety, biopsychosocial status and quality of life.

Methods: 32 women (age mean=52.43±8.32) diagnosed with FM according to American College of Rheumatology (ACR) criteria were included in this study. Patients were randomized into two groups as intervention group (n=15, mean age=48.80±7.48) and control group (n=17, mean age=55.64±7.87). While the connective tissue massage and clinical pilates exercises were applied to the treatment group, only clinical pilates exercises were applied to the control group. After the demographic characteristics and disease related data of the individuals were recorded; number of painful regions were assessed with Pain Location Inventory (PLI), disease impact with Fibromyalgia Impact Questionnaire (FIQ), functional status with Health Assessment Questionnaire (HAQ), anxiety with Beck Anxiety Inventory (BAI), quality of life with Short Form-36 (SF-36) and biopsychosocial status with Cognitive Exercise Therapy Approach (BETY) Scale were evaluated. All evaluations were made before and after treatment. All interventions were applied 3 days per week for 6 weeks by the same experienced physical therapist. One session for clinical pilates exercises consisted of 60 minutes (30 minutes warm up, 40 minutes clinical pilates exercises, 10 minutes cool down). Connective tissue massage was started from lumbosacral region and continued lower thoracic, scapular, interascapular, and cervical regions, respectively. The Kolmogorov-Smirnov Test was used to determine whether the continuous variables were normal distributions.

Results: When the pre-treatment and post-treatment results are analyzed; the results were significant in the intervention group of PLI (p = 0.007), SF 36 physical component (p = 0.025) and mental component (p = 0.017) and FIQ (p = 0.004), while in the control group the difference in SF 36 physical component (p = 0.008) and mental component (p = 0.024), FIQ (p = 0.001) and BAI (p = 0.043) was significant. Delta values were calculated by subtracting post-treatment results from pre-treatment results. When the delta values of the groups are compared, it was determined that the difference only in the PLI (p = 0.023) was significant in favor of the treatment group.

Conclusion: According to our results, connective tissue massage has been shown to be effective in reducing the number of painful areas in addition to the...