Results: 78 studies (n = 5,639 participants) met the inclusion criteria. There was a high risk of bias on blinding and most trials had small sample size (n<50). While multidisciplinary treatment (MDT) was the best for improving pain [-1.28 (-1.84, -0.72)], sleep [-1.14 (-2.38, 0.07)] and depression [-1.20 (-1.99, -0.46)], balneotherapy and exercise were the most effective treatments for FIQ [-1.06 (1.51, -0.61)] and fatigue [-0.75 (-1.35, -0.25)], respectively (Figure 2).

Figure 2. Standardised mean difference (SMD) versus usual care in descending order for different outcomes

Data from 47 exercise trials (n = 3,271 participants) were analysed to examine comparative efficacy of different exercise types. Strengthening showed the greatest benefits for FIQ [-0.76 (-1.39, -0.15)], pain [-0.94 (-1.58, -0.29)] and depression [-0.83 (-1.53, -0.14)], whereas aerobic exercise was the best for fatigue [-0.98 (-2.33, 0.18)] and sleep [-0.96 (-2.08, 0.13)] (Table 1).

Table 1. Relative effect size between types of exercises

FIQ					
Aerobic	-0.58	-0.09	0.18	0.12	-0.57
	(-1.13, -0.03)	(-0.55, 0.36)	(-0.44, 0.80)	(-0.36, 0.57)	(-0.95, -0.24)
-0.60		0.49	0.76	0.70	0.004
(-1.36, 0.18)		(-0.23, 1.20)	(-0.07, 1.58)	(-0.04, 1.41)	(-0.67, 0.64)
-0.10	0.49	Mind-body	0.27	0.20	-0.49
(-0.74, 0.53)	(-0.50, 1.49)		(-0.37, 0.91)	(-0.24, 0.65)	(-0.85, -0.15)
0.05	0.65	Mixed	-0.06	-0.06	-0.69
(-0.59, 0.70)	(-0.35, 1.63)		(-0.73, 0.59)		(-1.06, -0.34)
0.21	0.80	0.31	-0.06	Strengthening	-0.76
(-0.42, 0.84)	(-0.19, 1.79)	(-0.41, 1.02)	(-0.73, 0.59)		(-1.39, -0.15)
-0.73	-0.13	-0.62	-0.78	-0.94	
(-1.16, -0.30)	(-1.02, 0.74)	(-1.15, -0.11)	(-1.31, -0.26)	(-1.58, -0.29)	
Pain					

Data are standard mean difference (95% credible interval) between exercises, pairwise from the top left to the bottom right. The negative value indicates that the first exercise is more effective than the second exercise. For example, aerobic is better than flexibility for FIQ -0.58 (-1.13, -0.13), but not pain -0.60 (-1.36, 0.18).

Conclusion: Several non-pharmacological interventions are beneficial for FM. However, the effect size varies between interventions and outcomes. All types of exercises are effective for FIQ and pain apart from flexibility exercise. The results of this study may be used to guide the selection of the most effective non-pharmacological interventions according to the predominant symptom in individual patients.

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Disclosure of Interests: : None declared

DOI: 10.1136/annrheumdis-2020-eular.803

THU0462

CHARACTERIZATION OF PATIENTS WITH FIBROMYALGIA AFFECTS WITH OR WITHOUT JOINT HYPERLAXITY SYNDROME

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Background: The prevalence of joint hypermobility (JH) and Joint Hypermobility Syndrome (JHS) in patients with fibromyalgia (FM) is considerable and is much more than can be explained at random(1). Some authors propose that FM and JHS share a common pathophysiological mechanism in some patients. Currently it is accepted that Ehlers-Danlos Syndrome Hypermobility subtype (EDSh) and JHS are the same entity. We regard the subgroup of FM patients with JHS a different subtype of FM, even phenotypically similar to EDSh.

Objectives: Determine the possible differences between both groups according to their body composition, bone metabolism and clinical findings.

Methods: Our study is observational, descriptive, transverse cohort study in which we included 86 women with fibromyalgia recruited at the Fibromyalgia and Chronic Fatigue Unit at Parc Salut-Mar in Barcelona, Spain. The patients were grouped according to the presence or absence of JHS, following the Brighton Criteria. Diverse clinical data was collected: Pain Visual Analogue Scale (PVAS), time from pain onset, time from diagnosis, somatic symptoms, state of mind, presence of a FM trigger, concurrent medication, anxiety, quality of life, disease impact, anthropometric data, Bioelectrical Impedance Analysis (BIA), bone density test (BMD) and bone metabolism data in blood samples.

Results: 51 patients were included in the FM group and 35 patients in the FM-JHS group. We did not find differences between groups PVAS; time from pain onset; somatic symptoms using the Psychiatric Disorder and Somatic Pathology Scale (TOPYPS); nor Fibromyalgia Impact Questionnaire (FIQ). Both groups scored similarly on SF-36 Health Questionnaire. The use of opioids was more common in the FM group (p<0.001). Anxiety disorder (AnD) was present in a greater proportion of FM-JHS (p<0.001). We found the Body Mass Index and Muscle Mass (MM) to be less in the FM-JHS group (p=0.001 and p=0.008, respectively). Obesity and fat mass (FatM) were more frequent in the FM group. The FatM and less MM correlated with less quality of life on the SF-36 scale. There was less bone mass (BM) in the FM-JHS group (p=0.005). We found an inverse correlation between the Beighton score and the MM and BM in the FM-JHS group. The FM-JHS group also had less bone mineral density (BMD) at total hip DXA, with significant differences p=0.038. The BM by Bioelectrical Impedance Analysis (BIA) had a positive correlation on the BMD by DXA. The optimum point, capable of distinguishing between normal DXA and osteopenia/osteoporosis was 2,325kg with a specificity of 86% and sensibility of 52%. Vitamin D deficiency/insufficiency was found in 62/84 (73.8%) without significant differences between groups (p>0.05).

Conclusion: Our work revealed that FM patients with JHS are different from FM without JHS, by manifesting differences in certain clinical, anthropometric, and bone metabolism features.

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Disclosure of Interests: : None declared

DOI: 10.1136/annrheumdis-2020-eular.4115

THU0463

EFFICACY AND SAFETY OF NERIDRONATE IN BONE EDEMA SYNDROME

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Background: Bone Marrow Edema Syndrome (BMES) is a severely disabling pain syndrome without a definite treatment and refers to transient clinical conditions with unknown pathogenic mechanism, such as transient osteoporosis of the hip (TOH), regional migratory osteoporosis (RMO), and reflex sympathetic dystrophy (RSD). Magnetic resonance imaging is used for the early diagnosis and monitoring the progression of the disease. Early differentiation from other aggressive conditions with long-term sequelae is essential in order to avoid unnecessary treatment.

Objectives: Aim of this monocentric trial was to test the efficacy and the safety of the amino-bisphosphonate neridronate in patients with BMES administered in two different regimens.