effective and well-tolerated to treat hyperuricemia in CKD patients. Although several evidences demonstrated the usefulness of febuxostat in hyperuricemic CKD patients, clinical studies aimed at the CKD patients with inappropriately controlled hyperuricemia by allopurinol have been relatively lacking.
Objectives: The study objective is to evaluate the safety and efficacy of febuxostat in patients, who had CKD with severe renal impairment and did not meet with the target uric acid levels using allopurinol.
Methods: Data were collected from 168 patients who had CKD with more than stage 3b and changed from allopurinol to febuxostat due to uncontrolled hyperuricemia between 2005 and 2014 at Yonsei University Medical Center. Uric acid and creatinine were analyzed at baseline and during the first 6 and 12 months after conversion of febuxostat. Estimated glomerular filtration rate was calculated using the formula of MDRD equation. The patients were defined as a well-controlled state when the uric acid values of the study subjects reached within 6.0 mg/dL.
Results: The mean age was 60.7±14.6 years, and 129 patients (76.8%) were male. The number of patients was 25 (14.9%) in CKD stage 3b, 75 (44.6%) in stage 4, 8 (4.8%) in stage 5, 38 (22.8%) in patients treated with maintenance dialysis, 22 (13.1%) in patients underwent kidney transplantation. The mean estimated GFR (eGFR) and uric acid levels at baseline was 23.1±17.3 ml/min/1.73m^2 and 8.3±2.4 mg/dL, respectively. Most of the patients was treated with 40 or 80mg of febuxostat during the study period. The mean uric acid levels at 6- and 12-month after febuxostat treatment were significantly reduced compared to uric acid levels at baseline (5.2±2.1 mg/dL at 6-month and 4.9±2.2 mg/dL at 12-month, $p<0.001$, respectively). More than 70% of study subjects reached to the target of uric acid levels less than 6mg/dL at 6- and 12-months after treatment of febuxostat [122 (72.6%) patients at 6-month and 133 (79.2%) patients]. The creatinine levels at baseline and 6-month were comparable (3.42±2.03 vs. 3.38±2.16 mg/dL at baseline and 6-month, p=0.61), meanwhile, the creatinine levels were significantly increased after 12-month compared to those at baseline (3.69±2.46 mg/dL, $p<0.01$). Abnormality of liver function test was observed in only one patient during the follow up period. None of the patients did not discontinue drug due to adverse events.
Conclusions: Present study demonstrated that substantial hyperuricemic CKD patients treated with febuxostat were achieved the target of uric acid levels without adverse events. Febuxostat is an effective and safe uric acid lowering drug in allopurinol-intolerant patients with advanced CKD.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.2925

THURSDAY, 15 JUNE 2017

Fibromyalgia

THU0468 DIAGNOSTIC EXPERIENCE OF PATIENTS WITH FIBROMYALGIA – A SYSTEMATIC SYNTHESIS OF QUALITATIVE STUDIES

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Background: In recent years, the evidence-based practice (EBP) movement has become embraced by clinicians and scientists world-wide. A guiding principle of the EBP is that the best evidence available should inform clinical practice. At the same time, patients' experiences should be taken into consideration in the clinical disicion-making. Over the years, the diagnosis of fibromyalgia (FM) has been subject to numerous debates among scientists and clinicians. Despite that a diagnosis may lead to a biographical disruption, be a starting point for patients to make sense of their illness, and shape expectations for the future, the diagnostic debates have not been appreciably informed by how patients themselves perceive the diagnosis.
Objectives: To examine how individuals experience the process and consequences of receiving a diagnosis of fibromyalgia
Methods: A systematic literature search of qualitative studies up to May 2016 was performed. A systematic search was carried out in Medline (*n*=562), PsychInfo (n=430), Cinahl, AMED (*n*=95), and Social Science Citation Index (*n*=486) up to May 2016, supplemented by items from the authors' knowledge of the literature. Duplicates, quantitative studies, studies addressing chronic pain with no specification of diagnosis or including patients with other diagnoses, editorials, reviews, conference reports and dissertations were excluded. After this reading 93 qualitative studies of patients' experience were read to identify whether they included information about patients' diagnostic experience. Twenty-six papers, one book and a book chapter were included. Information about diagnostic experiences were extracted and subjected to an interpretive analysis in accordance with principles of meta-ethnography.
Results: Years were normally spent consulting specialists in an attempt to confirm the reality of symptoms and make sense of the illness. In this process, the reality of the illness was questioned. Great relief was expressed at finally achieving the FMS diagnosis. However, relief waned when therapies proved ineffective. Health professionals and others again questioned whether individuals were genuinely ill, that the illness had a psychological nature, and whether they were doing their best to recover. For the patients, the diagnosis did not provide a meaningful explanation of their suffering and had limited power to legitimate illness. The patients felt blamed for their failure to recover which meant their personal credibility and moral identity were put at stake.
Conclusions: The FMS diagnosis has limitations in validating and making sense of patients' illness experiences and in providing social legitimation of their illness. Social relationships are strained during the diagnostic process and in the course of ineffective therapies.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.5035

THU0469 COMPARATIVE EFFECTIVENESS OF TAI CHI VERSUS AEROBIC EXERCISE FOR FIBROMYALGIA: A RANDOMIZED CONTROLLED TRIAL

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Background: Fibromyalgia is a complex disorder with strong psychological and pain components. Tai Chi is an integrated mind-body approach that enhances both physical and mental health and has great potential to treat fibromyalgia (1–2).
Objectives: We aimed to investigate whether Tai Chi is more effective with longer lasting effects than aerobic exercise.
Methods: We conducted a 52-week, single-blind, randomized trial of Tai Chi vs. aerobic exercise for fibromyalgia (ACR 1990 and 2010 diagnostic criteria). Participants were randomized to 1 of 4 Tai Chi interventions: 12 or 24 weeks of Tai Chi once or twice per week, or aerobic exercise held twice per week for 24 weeks. The primary endpoint was change in the Revised Fibromyalgia Impact Questionnaire (FIQR) score at 24 weeks. Secondary endpoints included change in patient's global assessment, the Hospital Anxiety and Depression scale (HADS), Sleep Quality Index (PSQI), arthritis self-efficacy scale (ASES-8), and quality of life. The comparative efficacy of the five groups was determined using longitudinal models based on the intent-to-treat principal.
Results: The mean age of subjects was 52 years (SD 12), mean years of body pain of 9 years (SD 8), 92% were women, and 61% were white. Treatment groups did not differ in baseline outcome expectation. The average of all 4 Tai Chi groups, compared to aerobic exercise, showed significant improvements in FIQR scores, patient's global, anxiety, and self-efficacy. All other outcomes favored Tai Chi over aerobic exercise (Table 1). The Tai Chi treatment with the same dosage as the aerobic group demonstrated an even larger effect for FIQR and for most other outcomes. The benefit of Tai Chi was consistent across instructors.
Conclusions: Tai Chi is more effective than aerobic exercise and can be considered as an important therapeutic option for patients with fibromyalgia.
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Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.3484

Abstract THU0469 – Table 1. Between-Group Differences in Outcomes at Week 24

Variable	Aerobic Exercise vs Tai Chi groups combined		Tai Chi 12-week vs 24-week		Tai Chi 1x/week vs 2x/week		Aerobic Exercise 2x24 Weeks vs Tai Chi 2x24 Weeks	
	Mean (95% CI)	P-Value	Mean (95% CI)	P-Value	Mean (95% CI)	P-Value	Mean (95% CI)	P-value
FIQR	5.5 (0.6, 10.4)	**0.03**	9.6 (2.6, 16.6)	**0.007**	4.5 (-2.5, 11.4)	0.21	16.2 (8.7, 23.6)	**<0.0001**
Patient's Global	0.9 (0.3, 1.4)	**0.005**	0.7 (-0.2, 1.5)	0.12	0.4 (-0.4, 1.2)	0.35	1.6 (0.7, 2.5)	**0.0006**
HADS Depression	0.7 (-0.3, 1.6)	0.16	1.4 (0.1, 2.6)	**0.04**	0.7 (-0.6, 1.9)	0.31	2.1 (0.5, 3.7)	**0.01**
HADS Anxiety	1.2 (0.3, 2.1)	**0.006**	0.4 (-0.8, 1.6)	0.55	-0.2 (-1.4, 1.0)	0.74	2.1 (0.6, 3.6)	**0.008**
ASES	1.0 (0.5, 1.6)	**0.0004**	0.5 (-0.3, 1.3)	0.23	0.1 (-0.7, 0.9)	0.73	1.5 (0.6, 2.5)	**0.002**
PSQI	0.3 (-0.6. 1.3)	0.49	1.0 (-0.4, 2.3)	0.16	0.3 (-1.0, 1.7)	0.62	1.0 (-0.6, 2.5)	0.22
SF-36 MCS	2.5 (-0.1, 5.0)	0.06	4.4 (0.8, 8.1)	**0.02**	-0.4 (-4.0, 3.2)	0.83	6.2 (1.9, 10.6)	**0.006**
SF-36 PCS	0.3 (-1.7, 2.2)	0.79	2.4 (-0.3, 5.1)	0.09	1.2 (-1.5, 3.9)	0.38	2.0 (-1.3, 5.3)	0.24

Positive scores indicate improved outcome in second listed group. Boldface indicates statistically significant differences between groups.