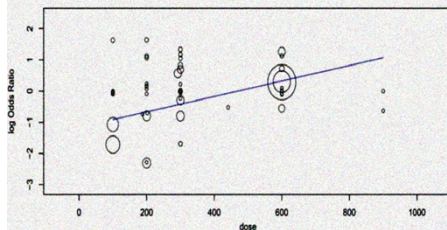


no association of dose of non-purine-like XO1 with incidence of TCE and SAE. Significant statistical heterogeneity was not observed in any test reported here.

Figure 1. Meta-regression analysis of dose of allopurinol versus logarithm of odds ratio (OR) of serious adverse events.



Conclusions: Our data from a meta-analysis of RCTs suggest that XO1 reduce the incidence of CV events, an effect possibly related (at least partly) to control of hypertension. However, higher doses of allopurinol (>300 mg/day) may possibly be associated with higher risk of serious adverse events and loss of cardiovascular protection.

References:

- [1] Richette et al. *Nat Rev Rheumatol* 2014;10:654–61.
- [2] Singh et al. *Arthritis Res Ther* 2016;18:209.
- [3] Agarwal et al. *J Clin Hypertens (Greenwich)* 2013;15:435–42.

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FRIDAY, 16 JUNE 2017

Low back pain and fibromyalgia

OP0270 LONG-TERM PROGNOSIS IN CHRONIC PLANTAR FASCIITIS BASED ON DISEASE DURATION AND ULTRASONIC CHANGES

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Background: Plantar fasciitis (PF) affects 7–10% of the population over a lifetime but the long-term prognosis is unknown. This study is the greatest within the long-term prognosis of PF and have the longest follow-up time.

Objectives: The aim was to assess the long-term prognosis of chronic PF based on duration of symptoms and ultrasonic changes (tendon thickness, heel spur, echogenicity and heel fat pad) and assess if any baseline cohort characteristics had an impact on the prognosis (sex, BMI, age, smoker status, physical work/sport and bilateral pain).

Methods: At baseline (2001–11) 269 patients were diagnosed with PF based on symptoms and ultrasound findings.

At follow-up (2016) all the participants were invited to participate in the project. Everyone was interviewed and offered a new ultrasound examination of their plantar fascia at both feet.

Results: 174 (65%) participated in the study, 52% women and 48% men and 137 had an additional US examination. 54% of the participants were asymptomatic at follow-up (asymptomatic group) and the mean duration of symptoms were 725 days (range 41–4018). 46% still had symptoms (symptomatic group). The follow-up period was 9.7 years (range 4.7–27.3). The risk of having chronic PF were 45.6% (95% CI 37.9–53.0) 10 years after debut of symptoms (figure 1). A multiple cox regression analysis found that women ($p < 0.01$) and participants with bilateral heel pain ($p < 0.01$) had a worse prognosis. The hazard rate ratio was 0.49 (95% CI 0.30–0.80) for women (every time 100 men were getting cured pr. year only 49 women were cured pr. year) and 0.33 (95% CI 0.15–0.72) for participants with bilateral heel pain (every time 100 with unilateral pain were cured pr. year only 33 with bilateral pain were cured pr. year). The remaining baseline cohort characteristics (all $p > 0.05$), tendon thickness ($p = 0.49$) and heel spur ($p = 0.88$) did not have an impact on the prognosis (table 2).

The mean tendon thickness was at baseline 6.9 mm in the asymptomatic group and 6.7 mm in the symptomatic group. The tendon thickness was reduced significantly to 4.3 mm at follow-up in both groups (both $p < 0.01$). Only 24% in the asymptomatic group had a normal tendon thickness and echogenicity at follow-up (6% in the symptomatic group).

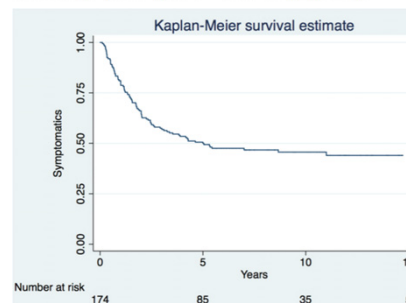
The participants had in average tried 3.8 (range 1–9) different treatment modalities and 93% received an ultrasound guided steroid injection at baseline. 11% of them were permanently cured 1 month after the injection despite symptoms for an average of 334 days' prior the injection. No atrophy of the heel fat pad was found in the sick foot who got the steroid injections compared to the contralateral foot that did not get the injection ($p = 0.66$).

Conclusions: 45.6% had PF 10 years after debut of symptoms.

The asymptomatic participants had in average plantar fasciitis for 725 days. The prognosis was significantly worse for women and participants with bilateral pain.

Figure 1:

Kaplan Meier survival function for all the participants. The y-axis shows the part who is symptomatic (1.00=100% is symptomatic). And the x-axis is the time in year since debut of symptoms (year 0 = debut of symptoms).



The tendon thickness decreased over time no matter of symptoms and had no impact on the prognosis, neither did heel spur.

Only 24% of the asymptomatic participants had a normal tendon on ultrasound at long-term follow-up.

Ultrasound guided steroid injection did not give atrophy of the heel fat pad in long-term follow-up.

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Disclosure of Interest: None declared

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OP0271 CORTICOSTEROID INJECTIONS FOR GREATER TROCHANTERIC PAIN SYNDROME: A RANDOMIZED DOUBLE-BLIND PLACEBO-CONTROLLED TRIAL

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Background: Although small observational studies have suggested that local corticosteroid (CS) injection may be effective in the management of the greater trochanteric pain syndrome (GTPS), no prospective placebo controlled study has been carried out to establish the efficacy of this common intervention.

Objectives: To perform a randomized double-blind placebo controlled trial to investigate the efficacy of local CS injection in the management of GTPS.

Methods: The trial was conducted in the Rheumatology unit of a University teaching hospital in Geneva, Switzerland. Inclusion criteria were lateral hip pain (LHP) for greater than 1 month, a LHP score of ≥ 4 in the preceding week, failure of another standard treatment (physiotherapy, analgesics, etc.) and typical LHP reproduced by palpation of the greater trochanter (GT). Participants were randomised in a 1:1 ratio to: 1) injection with a combination of local anaesthetic and CS (Treatment group), or 2) injection with normal saline solution (Placebo group). The Treatment group received 4ml of 1% Lidocaine (Rapidocain®) and 1ml of Bethametasone (Diprophos®). The Placebo group received 5ml of sterile saline solution. Injections were performed under ultrasound guidance. The study's predefined primary outcome of interest was the difference in pain intensity at 4 weeks post-injection between the 2 groups. Secondary outcomes included the number of "responders" (pain score improvement of ≥ 1.5) and the number of patients with low disease activity (LDA) (pain score ≤ 2.0). Patients were followed up for 6 months.

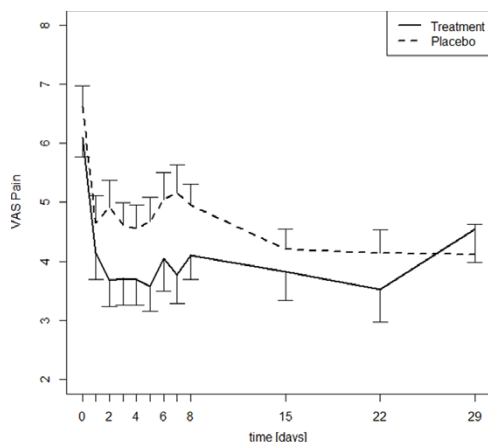
Results: A total of 46 patients were included and there were no significant differences between the 2 groups at baseline (Table 1). There were no significant differences between the 2 groups in terms of the reduction in pain at one month post-injection, with scores of -1.5 and -2.5 ($p = 0.23$) in the Treatment and Placebo groups respectively. When including all measures in the first 3 weeks and using multilevel regression, there was a marginally significant improvement

Table 1. Baseline patient characteristics

	Active treatment (n=21)	Placebo (n=25)	p-value
Age (years) [SD]	56.6 [14.6]	59.6 [13.1]	0.46
Sex (% female)	81.0	88.0	0.51
Weight (kg) [SD]	74.4 [15.1]	74.7 [15.8]	0.95
Height (cm) [SD]	163.6 [7.7]	153.6 [32.5]	0.18
BMI [SD]	27.9 [6.1]	28.8 [4.9]	0.59
Pain over past 24 hours	6.1 [1.5]	6.6 [1.8]	0.29
Pain on palpation of GT	6.6 [2.0]	7.1 [1.9]	0.40
Past injection of GT (% yes)	38.1	40.0	0.92
Oswestry total score [SD]	39.9 [13.1]	39.9 [14.9]	0.99
Womac pain score [SD]	251.4 [80.5]	247.2 [87.2]	0.87
Womac function score [SD]	414.6 [154.9]	366.1 [175.7]	0.33

Except where indicated otherwise, values are the mean (\pm standard deviation). GT = greater trochanter region.

in pain scores in favour of the Treatment group ($p=0.08$) (Figure 1). There were no significant differences in terms of the percentage of responders ($p=0.32$), or patients with LDA ($p=0.50$) between the 2 groups at follow up. There were no significant differences in pain scores between groups at 3 and 6 months post-injection.



Conclusions: Local corticosteroid injection in the management of GTPS is only marginally effective for a few weeks. Given the lack of long-term improvement and the potential for cortisone-related side-effects, this intervention is of limited benefit.

Disclosure of Interest: None declared

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OP0272 CHRONIC LOW BACK PAIN AND ANXIETY: SIGNIFICANT DECREASE WITH GLUCOSAMINE-CHONDROITIN SULFATE TREATMENT IN A LARGE, COMMUNITY-BASED, PILOT, OPEN PROSPECTIVE INTERVENTIONAL STUDY

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Background: Low back pain (LBP) is associated with 2.3, 2.2, and 1.6 times greater odds for mood disorders, anxiety disorders and alcohol abuse respectively (1). Continued anxiety may lead to a state of "learned helplessness", and both can propagate in a vicious cycle. Glucosamine-chondroitin sulfate (GCS) combination is widely used in the treatment of OA; however there are few prospective studies of its therapeutic merits in LBP.

Objectives: To study the efficacy of GCS in the decreasing anxiety in patients with chronic LBP in a large open pilot prospective study.

Methods: We enrolled patients 40 - 65 years of age who had LBP for >12 weeks with pain intensity >3 on a 0-10 point VAS in a single-arm, open-label prospective interventional study. Major exclusion criteria were the presence of fibromyalgia, spondylolisthesis, and alcohol and/or drug abuse. All patients were treated with ARTRA (combination glucosamine hydrochloride 500 mg - chondroitin sulfate 500 mg in tablet form; Unipharm Inc.) at a dose of 1 tab bid for the first month and then 1 tab daily for the next two months. The primary endpoint was pain intensity as measured on a 0-10 point VAS. Secondary endpoints included anxiety levels measured by Spielberger's State Trait Anxiety Inventory (STAI) adapted for Russia by Khanin (2). STAI evaluates the current "state" of anxiety, asking how respondents feel "right now", using items that measure subjective feelings of apprehension, tension, nervousness, worry, and activation/arousal of the autonomic nervous system as well as aspects of "anxiety proneness," including general states of calmness, confidence, and security ("trait"). Scores for each scale range from 20 to 80, with higher scores indicating greater anxiety.

Results: A total of 8,598 subjects (mean age 52.1 years, 67.3% women, mean BMI 27.4) were enrolled in the study, and formed the intent-to-treat (ITT) population. All but 95 subjects (1.1%) completed the study. Previously-reported ITT analysis with worst observation carried forward showed an improvement in pain at rest from mean (\pm SD) of 5.2 \pm 1.9 at study entry to 1.4 \pm 1.6 at 3 months ($p<0.0001$). Pain at movement decreased from 6.8 \pm 1.6 to 2.2 \pm 1.8 ($p<0.0001$). There was a strong correlation between increasing baseline STAI scores and baseline pain at rest and movement (both $p<0.0001$). After 12 weeks of GCS treatment, STAI "state" anxiety scores dropped from 49.3 (95% CI 49.1 to 49.6) to 35.8 (95% CI 35.6 -36.0) ($p<0.0001$). A similar reduction was seen in "trait" anxiety scores from 48.3 (95% CI 48.0-48.5) to 39.6 (95% CI 39.3-39.8) ($p<0.001$).

Conclusions: Although open and uncontrolled, this large pilot community-based study shows dramatic reductions in pain and anxiety (both "state" and "trait") in patients with LBP treated with GCS. With its benign safety profile, GCS therapy deserves serious evaluation in the management of LBP in a prospective randomized double-blinded clinical trial.

References:

- [1] Demyttenaere, K., et al., Mental disorders among persons with chronic back or neck pain. *Pain*, 2007. 129:332-42.
- [2] Spielberger, C. D. (1989). *State-Trait Anxiety Inventory: A comprehensive bibliography*. Palo Alto, CA: Consulting Psychologists Press.

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OP0273 A RETROSPECTIVE DATABASE STUDY OF ONE-YEAR ADEHERENCE AND PERSISTENCE WITH PHARMACOLOGICAL THERAPY AMONG FIBROMYALGIA PATIENTS IN ISRAEL

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Background: Fibromyalgia (FM) is a chronic debilitating disorder characterized by widespread musculoskeletal pain often accompanied by fatigue, allodynia and hyperalgesia. Literature is scarce regarding adherence to pharmacologic treatments available for FM patients.

Objectives: To assess one-year persistence and adherence with therapy among patients with FM and to identify factors associated with therapy discontinuation.

Methods: Using the comprehensive computerized database of Maccabi Healthcare Services, a large healthcare services provider in Israel, all adults (≥ 21 yrs) diagnosed with FM between 2008 and 2011 were identified. FM medications included the anti-convulsant pregabalin, SSRI/SNRI and tricyclic antidepressants. Time to treatment discontinuation, defined as a gap of ≥ 120 days in medication supply days, and proportion of days covered (PDC) with FM-specific therapies during one year from the first dispense were analyzed. Multivariable logistic regression models were constructed to analyze factors associated with low (PDC <20%) and high (PDC $\geq 80\%$) adherence.

Results: Overall 3932 eligible FM patients were identified, 88.7% females, mean SD (age =49.2 (12.7)). Pre-diagnosis use of medications of interest was documented in 41% of the patients. Of the remaining 2312, 56.1% were issued a prescription in the year following diagnosis and 45.0% dispensed at least on medication. One-year discontinuation reached 79.3% overall, and was highest for tricyclic antidepressants and lowest for SSRI/SNRI antidepressants (Table 1). Over one half of the patients (60.5%) were poorly adherent (PDC<20%) during the year and only 9.3% were highly adherent (PDC $\geq 80\%$). Low adherence was less prevalent among patients diagnosed with migraines (OR=0.62, 95% CI: 0.48-0.80) or with both depression and anxiety (OR=0.55; 0.40-0.76). High adherence was positively associated with socio-economic status (p -for-trend=0.022).

Table 1. Medications prescribed and dispensed in the first year from diagnosis, proportion discontinuing and time to discontinuation in the year following first dispense (N=1296)

Drug group	Prescribed N (%)	≥ 1 dispense N (%)*	Discontinued	
			N (%)**	Days to discontinuation Median (IQR)
Anti-Convulsants	313 (24.1%)	228 (72.8%)	186 (81.6%)	30 (30-106)
SSRI/SNRI antidepressants	606 (46.7%)	471 (77.7%)	347 (73.7%)	41 (30-171)
Tricyclic antidepressants	767 (59.1%)	601 (78.4%)	547 (91.0%)	30 (30-90)
Any drug	1296 (100%)	1041 (80.3%)	825 (79.3%)	40.5 (30-146)

*Percent of patients with at least one dispense out of those prescribed, e.g. 228/313x100=72.8% for anti-epileptic drugs. **% of those with ≥ 1 dispense.

Conclusions: Persistence and adherence with FM therapy in the year following diagnosis is remarkably low. Further research is needed to assess ways to improve continuation with therapy among FM patients.

Disclosure of Interest: None declared

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OP0274 FIBROMYALGIA IN REAL LIFE: A NATIONAL FRENCH WEB-BASED SURVEY IN 4516 PATIENTS

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Background: Fibromyalgia (FM) is the most frequent widespread chronic pain disorder (1,6% of the French population) (1). The medical and socioeconomic burden is high and severity depends on medical status and symptoms as defined by the OMERACT criteria (2). Most of the studies are performed in specialized centers, recruiting the most severe patients, but very few data exist on its real impact on daily life.

Objectives: The aims were to collect demographic data, symptoms, function, diagnosis, management strategies and health care utilization in real life, in a large population, and to determine clusters of patients.