

for scleroderma pathology reflecting autoimmunity, vasculopathy, inflammation and fibrosis. This mRSS signature needs to be validated in a larger set of SSC patients including assessment of change over time.

References:

[1] Mahoney et al. PLOS Computational Biology 2015; Vol 11; 1–20.
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How diet influences musculoskeletal diseases

OP0340 WEIGHT LOSS FOR OVERWEIGHT AND OBESE INDIVIDUALS WITH GOUT: A SYSTEMATIC REVIEW OF LONGITUDINAL OBSERVATIONAL STUDIES

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Background: Weight loss is a commonly recommended treatment for gout, but the magnitude of effect to expect has to our knowledge not previously been evaluated in a systematic review.

Objectives: The aim of this systematic review was to determine the benefits and harms associated with weight loss in overweight patients with gout.

Methods: Based on a pre-defined protocol (CRD42016037937), we searched six databases for longitudinal studies, quantitatively reporting the effect of weight loss in overweight gout patients. Risk of bias was assessed using the ROBINS-I tool. The quality of the evidence was assessed using GRADE.

Results: From 3,991 potentially eligible studies, 10 were included (incl. one RCT). Interventions included diet with/without physical activity, bariatric surgery, diuretics, metformin, or no intervention. Due to clinical heterogeneity of the included studies, data are presented for each study and synthesised separately. The effect on serum uric acid (sUA) ranged from -168 to 30 µmol/L, and 0% to 60% patients achieved sUA normalisation (i.e. sUA <360 µmol/L). Six out of eight studies (75%) showed beneficial effects on gout attacks. A dose-response relationship was indicated in two studies for sUA, sUA normalisation and gout attacks. At short term (<3 months) after bariatric surgery, one study showed temporary increase in sUA, and another showed temporary increased number of gout attacks. Other possible harmful effects, measured by proxies such as withdrawals due to adverse events and serious adverse events, were poorly reported.

Conclusions: The available evidence is in favour of weight loss for overweight

Abstract OP0341 – Table 1

Abnormality	Joints % (n)			Median score (IQR)		Difference* (90% CI)
	HC (n=10)	OA no pain (n=11)	OA pain (n=15)	OA no pain (n=11)	OA pain (n=15)	
Fluid	30 (3)	73 (8)	67 (10)	2 (0, 4)	1 (0, 2)	0 (-2, 1)
Capsulitis/synovitis	-(0)	36 (4)	60 (9)	0 (0, 1)	1 (0, 2)	0 (0, 2)
Extracapsular oedema	-(0)	45 (5)	73 (11)	0 (0, 2)	2 (0, 3)	1 (0, 2)
CL thickening	50 (5)	100 (11)	100 (15)	2 (2, 4)	2 (2, 4)	1 (-1, 2)
CL oedema	40 (4)	91 (10)	87 (13)	2 (1, 3)	3 (2, 4)	1 (0, 3)
CL degeneration	40 (4)	91 (10)	100 (15)	3 (1, 5)	4 (2, 6)	1 (-1, 3)
Proximal joint bone oedema	-(0)	9 (1)	20 (3)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Distal joint bone oedema	-(0)	27 (3)	20 (3)	0 (0, 1)	0 (0, 0)	0 (0, 0)
Proximal joint bone cyst	-(0)	27 (3)	47 (7)	0 (0, 2)	0 (0, 2)	0 (0, 1)
Distal joint bone cyst	10 (1)	27 (3)	7 (1)	0 (0, 1)	0 (0, 0)	0 (0, 0)

*Accounting for clustering of joints within patients. CI = confidence interval; HC = healthy controls; IQR = inter-quartile range; CL = collateral ligaments.

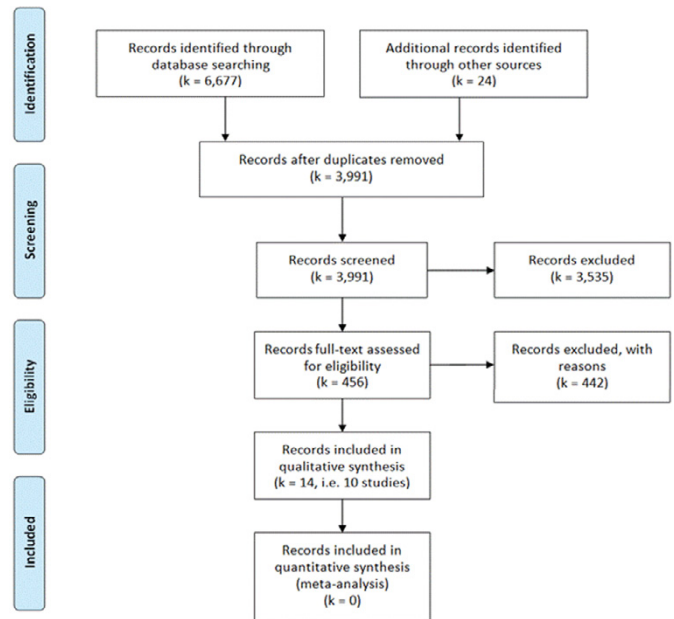


Figure 1: PRISMA flow diagram

ACR, American College of Rheumatology; CENTRAL, Cochrane Central Register of Controlled Trials; EULAR, The European League Against Rheumatism; ICTRP, the World Health Organization International Clinical Trial Registry Platform portal; pts, patients.

gout patients, with low, moderate and low quality of evidence for an effect on sUA, sUA normalisation, and gout attacks, respectively. At short term, temporary increased sUA and gout attacks may occur after bariatric surgery. There is an urgent need to initiate rigorous prospective studies (preferably RCTs) to provide more trustworthy estimates of benefits and harms of weight loss in overweight gout patients.

References:

[1] Richette P, Doherty M, Pascual E, et al. 2016 updated EULAR evidence-based recommendations for the management of gout. Ann Rheum Dis 2016;1–14, doi: 10.1136/annrheumdis-2016-209707.

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Can targeting disease activity in hand osteoarthritis improve our treatment in the 21st century

OP0341 CAN PAIN IN HAND OSTEOARTHRITIS BE ASSOCIATED WITH MRI COLLATERAL LIGAMENT ABNORMALITIES?

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Background: Many patients with hand osteoarthritis (OA) have little symptoms. Bone oedema and synovitis have been associated to pain in OA, but inflammation involving ligaments has not been studied, likely limited by inadequate MRI resolution. We have previously found significant ligament pathology in early and established hand OA (HOA) [1].

Objectives: We hypothesise that the well innervated ligaments are key to a better understanding of the relationship between joint structure and pain in HOA. This