Table 1. Age-matched comparisons across diagnoses

	Gout	PsA	RA	AS	p-value	p-value	p-value	p-value	p-value	p-value
	Gout	Gout	Gout vs PsA	Gout vs RA	Gout vs AS	Gout vs PsA	Gout vs RA	Gout vs AS	Gout vs PsA	Gout vs RA
Total (n)	249	249	249	249	N/A					
Age, mean (SD)	62.5 (11.2)	64.2 (10.2)	63.1 (11.6)	62.8 (10.5)	NS					
Education ≤12 years, n (%)	132 (53.0)	148 (59.4)	160 (64.3)	139 (55.8)	NS					
HAQ, mean (SD)	0.19 (0.40)	0.48 (0.55)	0.60 (0.63)	0.58 (0.58)	***	***	***	***	NS	NS
VAS General Health, mean (SD)	2.6 (2.3)	3.7 (2.4)	3.8 (2.6)	4.0 (2.3)	***	***	***	***	NS	NS
VAS Pain, mean (SD)	2.6 (2.4)	4.0 (2.6)	3.8 (2.6)	4.2 (2.4)	***	***	***	***	NS	NS
VAS Fatigue, mean (SD)	3.6 (2.6)	4.5 (2.7)	4.3 (2.6)	4.9 (2.5)	***	***	*	***	NS	*
SF-36 domains, median (IQR)										
Physical function	90.0 (75.0-95.0)	70.0 (51.3-95.0)	70.0 (45.0-90.0)	75.0 (50.0-90.0)	***	***	***	***	NS	NS
Role physical	100.0 (33.3-100.0)	50.0 (0.0-100.0)	50.0 (0.0-100.0)	50.0 (0.0-100.0)	***	***	***	***	NS	NS
Bodily pain	72.0 (42.0-100.0)	52.0 (41.0-74.0)	52.0 (41.0-74.0)	52.0 (41.0-64.0)	***	***	***	***	NS	NS
General Health	67.0 (47.8-80.8)	56.0 (35.0-72.0)	55.0 (37.0-71.0)	50.0 (35.0-71.0)	***	***	***	***	NS	NS
Vitality	65.0 (50.0-77.5)	57.5 (37.5-75.0)	50.0 (42.5-72.0)	50.0 (32.5-70.0)	***	*	*	***	NS	NS
Social function	100.0 (68.8-100.0)	81.3 (57.8-100.0)	81.3 (67.2-100.0)	81.3 (50.0-100.0)	***	**	**	***	NS	NS
Role emotional	100.0 (66.7-100.0)	100.0 (33.3-100.0)	100.0 (33.3-100.0)	100.0 (33.3-100.0)	**	NS	**	**	NS	NS
Mental health	82.0 (66.0-92.0)	78.0 (60.0-92.0)	73.0 (60.0-88.0)	73.0 (60.0-88.0)	**	NS	*	**	NS	NS
SF-36 summary scores, median (IQR)										
Physical component score	48.4 (38.8-54.7)	40.2 (28.5-50.2)	40.2 (28.2-49.0)	38.7 (30.1-48.2)	***	***	***	***	NS	NS
Mental component score	51.7 (43.7-56.5)	51.0 (39.2-56.4)	50.7 (39.6-56.3)	47.7 (37.1-55.3)	*	NS	NS	*	NS	NS

HAQ=Health Assessment questionnaire; IQR=Interquartile range; SD=Standard deviation; VAS=Visual Analogue Scale; NS=non-significant; * = significant at $p < 0.05$; ** = significant at $p < 0.01$; *** = significant at $p < 0.001$

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.1582

AB0634

BELIEFS ABOUT URATE LOWERING THERAPY DIFFER BETWEEN GENERAL PRACTITIONERS AND RHEUMATOLOGISTS

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Background: Uric acid lowering therapy (ULT) can be effective in gout if taken correctly (1), but non-adherence is a known problem (2). Although patients' adherence barriers regarding ULT, such as lack of knowledge on disease and therapy, and beliefs, have been widely studied (3), less is known physicians' beliefs.

Objectives: To investigate the physicians' beliefs on ULT treatment in both primary and secondary care in the Netherlands.

Methods: Cross-sectional study among all rheumatologists of the Sint Maartenskliniek and to all General Practitioners (GPs) of 17 practices, participating in the practice-based research network Family Medicine Network Nijmegen,

Netherlands. All participants filled out the beliefs about medication questionnaire (BMQ), adjusted for physicians; in addition data were collected on physician characteristics including working experience in total and gout consultations. The BMQ consists of two parts, a specific part with 10 questions about beliefs on necessity (N=5) and concerns (N=5) regarding ULT and a general part with 8 questions about beliefs on harms (N=4) and overuse (N=4) regarding medication in general. Each question is scored on a Likert-scale from 1-5, a higher score corresponds to higher beliefs on that category. Sum scores for all four categories were calculated. With the total scores on the specific BMQ including necessity and concerns beliefs, physicians were classified in four different categories (Table 1)(4).

Results: In total 112 physicians received the questionnaire, 28 of 37 rheumatologists (76%) and 45 of 75 GPs (60%) responded. Rheumatologists had less years of experience than GPs (median 8.5 years (IQR 3 – 14) versus (vs) 13 years (IQR 8-20)) and less hours of patient contact per week (15 hours (IQR 8.5 – 20) vs 24 hours (IQR 20 – 30)). Rheumatologists reported more consultations for gout per week than GPs: median 4 (IQR 1 – 6.6) vs 1 (IQR 0.2 – 1).

Rheumatologists scored higher on the BMQ necessity scale, 17.5 (95% CI 16.6 – 18.5) compared to GPs 16.1 (95% CI 15.1 – 17.1). GPs scored higher on BMQ concern scale, 12.1 (95% CI 11.4 – 12.7) compared to rheumatologists, 10.4 (95% CI 9.7 – 11.2). On medication in general, GPs scored higher on both overuse and harms scales compared to rheumatologists, 11.3 (95% CI 10.7 – 12) versus 9.9 (95% CI 9 – 10.7) and 8.3 (95% CI 7.9 – 8.7) vs 7.1 (95% CI 6.5 – 7.7), respectively. Table 1 shows classification according to the BMQ specific for both groups.

Table 1. Classification based on the adapted BMQ

	Rheumatologists (N=28)	GPs (N=45)
Acceptant (%)	19 (67.9)	16 (35.6)
Ambivalent (%)	0	8 (17.8)
Sceptic (%)	1 (3.6)	5 (11.1)
Indifferent (%)	8 (28.6)	16 (35.6)

Conclusion: For the majority of rheumatologist the necessity beliefs outweighs concern beliefs towards the use of ULT outweighs concern beliefs. GPs show a more heterogenic profile, including acceptant, indifferent and ambivalent beliefs towards ULT use. GPs also show higher harm and overuse concerns regarding medication in general. Next step is to investigate possible associations with actual ULT use and disease outcome.

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Acknowledgements: This study is sponsored by Grünenthal

Disclosure of Interests: Frouwke Veenstra: None declared., Johanna Vriezckolk: None declared., Henk J Schers: None declared., Noortje van Herwaarden: None declared., Bart van den Bemt Speakers bureau: Pfizer, AbbVie, UCB, Biogen and Sandoz, Consultant of: Delivered consultancy work for UCB, Novartis and Pfizer, Grant/research support from: UCB, Pfizer and Abbvie, Marcel Flendrie Consultant of: M. Flendrie has received consultancy fees from Menarini and Grünenthal., Grant/research support from: M. Flendrie has received grants from Menarini and Grünenthal. **DOI:** 10.1136/annrheumdis-2021-eular.1834

AB0635

EVALUATION OF THE INTIMA-MEDIA THICKNESS INDEX BY CAROTID DOPPLER IN PATIENTS WITH MONOSODIUM URATE DEPOSITION ARTHRITIS OF THE HOSPITAL DOCENTE PADRE BILLINI, DOMINICAN REPUBLIC

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Background: Hyperuricemia and gout are risk factors for atherosclerosis subclinical and cardiovascular complications. (1) However, it is still debated whether uric acid is an independent predictor of cardiovascular risk. (2) Vascular Doppler and in particular the measurement of the intima-media thickness and the detection of plaques are useful in the evaluation of cerebrovascular disease and cardiovascular risk. (3) An intima-media thickness greater than 0.9mm and / or the presence of atheromatous plaques in the carotid are predictive of high cardiovascular risk and silent heart disease. (4) Gouty arthritis has been associated with alteration of the carotid intima media thickness (cIMT) and subclinical atherosclerosis. Cukurova et al studied patients with gout, finding an increase in cIMT compared to patients with asymptomatic hyperuricemia. (5)

Objectives: Assess the carotid intima-media thickness in patients with monosodium urate deposits arthritis

Methods: Prospective, observational, cross-sectional study. Carotid Doppler was performed on patients in the outpatient clinic with a diagnosis of gout from November 2019 to 2020 of the rheumatology service of the Hospital Docente Padre Billini and healthy controls. Inclusion criteria, patients > 18 years, diagnosis of monosodium urate deposits arthritis according to the ACR / EULAR 2015 classification criteria, carotid Doppler, measurement of the cIMT. Controls without disease, matched by sex and age. The data was analyzed with SPSS V23 for Windows 10.

Results: Of 37 patients with a diagnosis of arthritis due to deposition of monosodium urate crystals, (34) met inclusion criteria, 100% male, 34 healthy controls. Average of 61.5 years. Average of the disease 8.2 years. Distribution 61% (21) intercritical gout, 32% (11) chronic tophaceous gout, 0.5% (2) acute gouty arthritis. Comorbidities 67% (23) dyslipidemia, 35% (12) hyperglycemia. 26% (9) presented arterial hypertension. 20% (7) have diabetes mellitus. 58% (20) are alcohol drinkers, 11% (4) smokers. Mean uric acid 8.6 mg / dl at Doppler, 52% (18) elevated serum creatinine. Carotid Doppler in patients with gout showed a 55% (19) increase in the cIMT > 0.9mm, with a mean of 2.03mm (1.95 SD). Carotid Doppler in healthy controls 17% (6) increased cIMT, mean of 1.8mm (2.2 SD) (P = 0.040). Patients with gout had 29% (10) atheromatous plaques, 17% (6) calcified plaques versus 14% (5) atheromatous plaques, 8% (3) calcified in healthy controls.

Conclusion: Our study showed that half of the patients with gout had increased cIMT compared to a third of the healthy controls. The presence of atheromatous and calcified plaques was mainly associated with dyslipidemia, so we can conclude that the evaluation of the intima-media thickness by carotid Doppler allows it to be a predictor of cardiovascular disease in patients with gout.

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Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.2747

AB0636 ASYMPTOMATIC HYPERURICEMIA IN INFLAMMATORY RHEUMATIC DISEASES

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Background: Uric acid (UA) is well-known biomarker of cardiovascular risk and inflammation. However, the data about interrelations between asymptomatic hyperuricemia (AHU) and rheumatic diseases (RD) are limited and contradictory [1].

Objectives: to identify the occurrence of AHU in pts with different RD and to evaluate the interrelations between the AHU and clinical features of the RD.

Methods: The study included data from 822 pts with AHU and RD involved in the Saint-Petersburg Register of Pts with AHU in period from the 01jan2000 to the 01apr2020. The AHU was defined as the serum level of uric acid (UA) that exceeded 360 µmol/l without signs of gouty arthritis. Pts with the secondary reasons of AHU (an oncologic diseases, late stages of chronic kidney disease, etc), and inflammatory diseases another than RD were excluded from the study.

Patient's demographical characteristics, duration of AHU, level of UA, activity of RD, ESR, CRP, urate-lowering therapy (ULT) were analyzed. The study was approved by local ethic committee. Statistics was performed with SPSS17.

Results: Characteristics of the Patients with the RD and AHU are present in Table 1. The duration of AHU in pts with the RD was 3.4±3.4 [0.08-18] years, mean duration of follow-up 2.7±4.0 years, mean number of visits during the period of follow-up was 3,2 [min 1; max 7], ESR 26.0±14.1 mm / h, CRP 19.6±21.0 mg/l.

Table 1. Characteristics of the Patients with the Rheumatic diseases and asymptomatic hyperuricemia.

	Age, years (Mean±SD)	Male, %**	Serum UA, µmol/l (Mean±SD)	Normalization of UA during the follow-up, n (%)
RD, n=822	56.7±14.5	40.27	493.3±98.5	242 (29.44)**
RA, n=329	64.2±12.1	3.74	504.8±107.5 [#]	99 (30.09) ^{##}
PsA, n= 149	56.6±12.9	53.69	531.5±94.9 [#]	32 (21.48) ^{##}
SpA, n= 107	45.6±15.1*	33.43	520.8±86.5 [#]	18 (16.82) ^{##}
SLE, n=137	50.3±14.1*	20.44	451.6±91.4	57 (41.61)
SSc, n= 57	61.0±12.4	22.81	456.2±99.5	20 (35.09)
SD, n= 43	62.0±10.7	16.28	442.4±107.5	16 (37.21)

RD — rheumatic disease; RA — rheumatoid arthritis; PsA — psoriatic arthritis; SpA — spondyloarthritis; SLE — systemic lupus erythematosus; SSc — systemic sclerosis; SD — Sjogren's disease; * — p<0.001 for the differences with RD, RA, PsA, SSc, SD; ** — p < 0.01 for all intergroup differences; [#] — p < 0.01 for the differences with RD, RA, SSc, SD; ^{##} — p < 0.01 for the differences with RA, SSc, SD.

Were revealed the interrelations between the level of UA and ESR (Spearman's R=0.1, p=0.01), and UA and CRP (Spearman's R = 0.12, p=0.001).

The level of UA in male pts was 507.0 [361-940], in female pts 450.0 [361-1010] µmol / l (p<0.0001), in SLE pts with elevated anti-nuclear factor (ANF) UA was 429 [361-940] and with normal 494 [361-973] (p<0.0001). In pts with high and low RD activity UA was 490 [361-940] and 454 [363-1010] µmol / l respectively, (p<0.0001). The higher UA level was found in any RD as compared with UA in low activity of the same RD (p<0.0001 for all the differences). Normalization of UA was found in 243 (29.6 %) pts, lack of normalization of UA in 434 (52.8 %) of cases, n = 677, Table 1. ULT received 219 (26.6 %) pts. Normalization of UA without ULT was registered in 16 (1.9 %) of the pts.

Conclusion: UA level is higher and normalize less often in patients with SpA and PsA as compared with RA, SLA, SSc and SD pts. In any of analyzed rheumatic diseases the level of UA is higher in male pts and in pts with high disease activity.

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Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.2980

AB0637 THE STATE OF GOUT MANAGEMENT IN WALES RHEUMATOLOGY UNITS

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Background: Gout is the most common inflammatory arthritis with both the prevalence and incidence showed significant rise in the UK in recent years¹.

The most frequent reasons for referral from primary care were diagnostic uncertainty 54%, failure to respond to primary care management 28%, and complex comorbidity 25%².

From primary care perspective, increased urate level (p=0.0001), young age (p=0.009), fewer comorbidities (p=0.039) constituted the most common risk for gout General Practice consultations and in addition to poor compliance to urate lowering treatment ULT (p=0.004) and lower CVS risk scores (p=0.038) these all factors comprised the independent risk factors for Gout flares³.

Objectives: To compare the management of gout in the rheumatology services in Wales against the 2017 British Society for Rheumatology (BSR) Guidelines.

Methods: •A descriptive study over an 8-week period from January to February 2019, used Simple Analysis in calculating the frequency (%).

•Data were collected from notes of 79 patients referred to rheumatology departments across Wales using the British Society for Rheumatology (BSR) 2017 Gout Guidelines Audit Tool.

•The audit cohort comprised 62% of chronic gout patients and 38% of acute admissions.

Results:

Gout Audit	All Wales 2019 (BSR Guidelines 2017)	UK National Audit (BSR Guidelines 2007)*
Education material	54%	No available data
Newly start ULT	59%	42%
ULT was prescribed	87%	33%
ULT was continued	78%	76%
Prophylaxis	94%	94%
Febuxostat	21%	10%
ULT main indication	>2 attacks (71%)	Tophi (81%)
eGFR <60 ml/min	40%	30%
Urate level checked	83%	72%
Urate <300 µmol/L	36%	25%
Urate <360 µmol/L	58%	45%