

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.

REFERENCES:

- [1] Choi HK, Curhan G (2007) Independent impact of gout on mortality and risk for coronary heart disease. *Circulation* 116:894–900
- [2] Feig DI, Kang DH, Johnson RJ (2008) Uric acid and cardiovascular risk. *N Engl J Med* 359:1811–1821
- [3] Choi, HK, Rho, Y-H., Zhu, Y., Cea-Soriano, L., Aviña-Zubieta, JA, Zhang, Y. The risk of pulmonary embolism and deep vein thrombosis in rheumatoid arthritis: A UK population-based outpatient cohort study. *Ann Rheum Dis*. 2013; 72 (7): 1182-7
- [4] Gkaliagkousi, E., Gavrilaki, E., Doulas, M., Petidis, K., Aslanidis, S., Stella, D. Cardiovascular risk in rheumatoid arthritis: Pathogenesis, diagnosis, and management. *J Clin Rheumatol Pract Rep Rheum Musculoskelet Dis*. 2012; 18 (8): 422-30
- [5] Cukurova S, Pamuk ÖN, Ünlü E, Pamuk GE, C, akir N. Subclinical atherosclerosis in gouty arthritis patients: a comparative study. *Rheumatol Int*. 2012; 32(6):1769–73.

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.2747

AB0636 ASYMPTOMATIC HYPERURICEMIA IN INFLAMMATORY RHEUMATIC DISEASES

A. Fonturenko¹, R. Bashkinov^{1,2}, V. Mazurov^{1,2}, M. Petrova^{2,3}, O. Inamova^{2,3}, I. Gaydukova^{1,2}. ¹Clinical Rheumatological Hospital No25, Center for diagnosis and treatment of autoimmune diseases, Saint-Petersburg, Russian Federation; ²North-Western State Medical University named after II Mechnikov, Department of Therapy, Rheumatology, Examination of Temporary Disability and Quality of Medical Care named after E. E. Eichwald, Saint-Petersburg, Russian Federation; ³Clinical Rheumatological Hospital No25, City Clinical Center of Gout, Saint-Petersburg, Russian Federation

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.

REFERENCES:

- [1] K.Bosmansky, M. Ondrasik. *Ter Arkh*.1987;59(4):22-5.

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.2980

AB0637 THE STATE OF GOUT MANAGEMENT IN WALES RHEUMATOLOGY UNITS

M. Saleh¹. ¹University Hospital of Wales, Rheumatology, Cardiff, United Kingdom

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 umol/L	36%	25%
Urate <360 umol/L	58%	45%