

than 6 months) was examined by clinical, laboratory, X-Ray and ultrasonography. After investigation the following diagnoses were made: Gout in 32 patients, Osteoarthritis in 28 patients, Rheumatoid arthritis in 28 patients, Psoriatic arthritis in 16 patients. Ultrasound investigation of affected joints was performed in all subjects by linear probe 18 MHz. Urate crystal deposits were seen on the surface of the hyaline cartilage as a hyperechoic thin line or dots on the cartilage, which sometimes imitate double contour of bones [2, 3]. Sensitivity and specificity of ultrasound sign were compared with subcutaneous tophi, bone cysts (X-Ray sign) and hyperuricemia.

Results: The urate crystal deposits in gyalinic cartilage of at least one of affected joints were revealed in 28 of 32 (87,5%) patients with Gout, in 3 of 28 (10,7%) patients with Osteoarthritis and 1 of 16 (6,3%) patients with Psoriatic arthritis. Comparative data of sensitivity and specificity of crystal deposits, bone cysts, subcutaneous tophi and hyperuricemia are represented in table below.

Table 1. Sensitivity and specificity of different diagnostic markers in yearly stage of gout

Diagnostic marker	Sensitivity, %	Specificity, %
Hyperechoic lineal urate deposits in gyalinic cartilage	87,5	94,4
Bone cysts	21,7	88,8
Subcutaneous tophi	25,0	98,6
Uric acid level from 360 mkmol/l up to 480 mkmol/l	46,9	86,1
Uric acid level more than 480 mkmol/l	34,4	97,2



Conclusions: Ultrasound detection of urate crystal deposits in hyaline cartilage in patients with gout in yearly stage has a high sensitivity and comparable level of specificity with other diagnostic markers of Gout.

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AB0865 SERUM URATE AND ITS ASSOCIATION WITH RACE IN YOUNG ADULTS: BASELINE ANALYSIS FROM A RANDOMIZED CLINICAL TRIAL

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Background: Increased levels of serum urate (sUA) have been reported in association with hypertension, chronic kidney disease and obesity. All these conditions are over-represented in US African Americans, who also have greater environmental risk factors for hyperuricemia development including elevated fructose intake. Our group has previously reported that young African Americans have lower sUA concentrations than Caucasians after adjustment for clinical and demographic factors.

Objectives: To determine whether there is a differential association between sUA and race in young adults.

Methods: We examined baseline data on consecutively enrolled individuals (age 18 – 40 years) in an interventional study aimed at lower blood pressure (BP) through the administration of urate-lowering therapy. African Americans were over-represented in the sample by study-design. Inclusion criteria included a sUA of ≥ 5.0 mg/dL for men or ≥ 4.0 mg/dL for women. After means comparisons between races, we performed multivariable adjustments for age, gender, BP, and body mass index (BMI) a multiple linear regression model. Data reported are mean \pm standard deviation.

Results: 86 participants recruited from Birmingham, AL were included in the analysis. Participants had a mean age of 28.5 ± 6.9 years, 36% were female, 41% were African Americans (AAs), and the mean BMI was 29.2 ± 6.8 kg/m². The mean sUA was 5.9 ± 1.2 mg/dL (n=77, range: 3.9 to 8.5 mg/dL). We found a significantly lower sUA for African Americans compared to persons of other races (5.4 ± 1.2 mg/dL vs 6.2 ± 1.1 mg/dL, p=0.005). After multivariable analysis the difference in sUA between AAs and other races was attenuated to non-significance (p=0.33) due to the effects of BMI and gender. As expected, the association between sUA and gender was significant (Table).

Table 1. Multivariable regression model on the association between serum urate and race among young adults (n=86)

Variable	Estimate (95% confidence interval)	p
Race (African-Americans versus other races)	-0.34 (-0.82, 0.15)	0.18
Age (per year)	0.02 (-0.02, 0.05)	0.34
Gender (men versus female)	1.36 (0.87, 1.85)	<0.001
BMI (per unit of kg/m ²)	0.04 (0.00, 0.07)	0.035

BMI = Body-mass index.

Conclusions: In this cross-sectional analysis of young adults, AAs had lower sUA concentrations than other races. However, this difference is explained by the effect of gender differences in sUA and BMI. A potential limitation is that participants were enrolled after they met a sUA threshold so not all the ranges of sUA in a normal population are represented in this analysis. Larger studies will be needed to fully address this question.

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AB0866 EVALUATION OF THE ACHIEVEMENT OF A THERAPEUTIC TARGET OF <6 MG/DL IN ALGERIAN PATIENTS TREATED FOR GOUT

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Background: Gout is one of the most prevalent rheumatic conditions in the developing world, due of the aging of the population and the modifications in the life style. The 2014 EULAR recommendations for the management of gout have defined the therapeutic target of 60 mg/L for gouty patients (recommendation 8). The aim of the study was to assess the adherence of Algerian patients with gout to these recommendations.

Methods: We have retrospectively analyzed patients files aged 18 and more, followed in a rheumatology setting for gout, in 4 centers in Algeria. Demographic, clinical and lab data were collected. We have excluded files with missing data. Were noted the used therapeutics and serum uric acid in every patient through time. Tolerance was noted.

Results: We have analyzed 145 complete files: 98 men (68%), with a mean age of 65.4 ± 11.4 years. All patients except two had rheumatic manifestations, 20 patients had renal insufficiency and 15 had tophi. Main comorbidities were hypertension (40 patients) and diabetes (25 patients). The mean serum uric acid level was 96 ± 14 mg/L. Concerning symptomatic drugs, 81 patients have taken colchicine and 15 NSAIDs, the remaining patients have taken other drugs or combination therapy. All patients but one have received serum uric acid lowering therapy (allopurinol in majority of cases), with a median dosage of 200 mg/day, and only 5 patients taking more than 300mg/day. The mean serum uric acid level at 6 months was 58 ± 14 mg/L, with 58% of patients achieving a level of < 60 mg/L.

Conclusions: In rheumatology settings in Algeria, more than 93% of gouty patients received allopurinol, with an excellent tolerance. However, it seems that dosage is insufficient, with only 58% of patients achieving the EULAR recommendation 8. More efforts have to be provided to optimize this therapy.

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