SAT0517 | PROGNOSTIC VALUE OF LONG-TERM CUMULATIVE URIC ACID LEVEL ON CARDIOVASCULAR DISEASES IN GOUT PATIENTS WITH TREATMENT
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Background: The role of serum uric acid as an independent risk factor for cardiovascular disease (CVD) remains unclear, although hyperuricemia is associated with ischemic heart diseases (IHD), cerebrovascular accidents (CVA), or peripheral arterial occlusive diseases (PAOD). In particular, no study showed long-term cumulative effect of serum uric acid on CVD in gout patients with treatment.

Objectives: The aim of this study is to evaluate long-term cumulative effect of serum uric acid on CVD and determine predictive factors of CVD in gout patient with uric acid lowering treatment.

Methods: All patients who had a first visit for gout at Samsung Medical Center between 1995 and 2003, and follow-up until December 2012 or expired during follow-up period were included and retrospectively analyzed. Cox regression analysis was performed to control the effect of uric acid concentration of the baseline sample. Cox regression analysis was performed to assess the effect of long-term cumulative uric acid level on CVD in gout patients with treatment. Results: Three-hundred twenty seven patients with gout were observed. Mean age at diagnosis of gout was 45.7 and mean follow-up duration was 14.1 years. Of these, 67 (20.5%) patients developed CVD during follow-up period, which included 34 IHD, 28 CVA, and 5 PAOD. CVD related death was observed in 10 patients (3.1%). Mean duration of gout at diagnosis of CVD was 13.3 years. Frailty, uric acid level of serum uric acid concentration above 7.0 mg/dl, age at diagnosis of gout, family history of premature CVD, and hypertension were associated with increased risk of CVD (adjusted HR 1.86 (1.08-3.18), p=0.025, 2.65 (1.59-4.40), <0.0001, 1.33 (1.02-1.74), p=0.037, 1.22 (1.14-1.30), p=0.0001, respectively). Age at diagnosis of gout, family history of premature CVD and diabetes mellitus were significantly associated with increased risk of CVD (adjusted HR 1.97 (1.05-3.70), p=0.034, 1.55 (1.04-2.30), p=0.033, respectively).

Conclusions: Our data demonstrated serum uric acid level was associated with increased risk of CVD in gout patients with treatment, which is a first data determined the long-term cumulative effect of uric acid on CVD. To control hyperuricemia is important to prevent CVD beyond gout itself in patients with gout.

Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2014-eular.4817

SAT0518 | COPING PATTERNS AND ASSOCIATED FACTORS IN AN INCEPTION COHORT OF PATIENTS WITH GOUT
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Background: Coping patterns relate to demographic, socioeconomic, clinical, and therapy with patients with chronic diseases. In patients with rheumatic diseases, the evasive pattern is associated with the poorest outcome.

Objectives: To describe coping patterns in patients with gout and its association with clinical variables and therapeutic adherence.

Methods: The study includes a large inception cohort of patients with gout (ACR and COD criteria) attending the Rheumatology departments of two major hospitals started in 2010. Most patients attending these two hospitals are poor and lack of financial support to cover the cost of medical care. Demographic, clinical, biochemical and therapy variables were recorded at baseline and every six months visits. The HAQ, EuroQoL, and Coping and Adherence questionnaires previously developed and validated in our country, were administered to all patients at every visit. Good adherence (GA) was defined by the intake of ≥80% of the doses prescribed. Statistical analysis included the t, Mann Whitney, χ2, and Fisher's tests.

Results: There were 235 patients with gout (97% males, mean age 47±12.6 years, mean duration 14±2.0 years, 66% tophi, 16% with crystal deposition in an educational level of 9.4±4.2 years at baseline. Coping patterns were evasive in 70% of the patients whereas 14% and 13% showed a negative emotional pattern or a reassertive + direct pattern, respectively. The association between evasive pattern and a lower educational level, more severe disease (number of acute flares, bigger tophi size, HAQ, VAS for pain and general health) was highly significant. Evasive pattern was still the most frequently found in 43% patients that completed the 12th month evaluation. Interestingly, 78% of the patients with evasive pattern in both visits have good therapeutic adherence, but have severe disease (see table).

Conclusions: In patients with gout, evasive was the most frequent pattern of coping with the disease found in this study. Factors associated with this pattern include low educational level and severe disease. Interestingly, it does not seem associated with adherence and clinical response to treatment.

Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2014-eular.2970

SAT0519 | FACTILATORS AND BARRIERS TO ADHERENCE TO URATE-LOWERING THERAPY IN AFRICAN-AMERICANS WITH GOUT: A QUALITATIVE STUDY
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Background: African-Americans share a disproportionate burden of gout compared to Caucasians, with a higher prevalence, lower likelihood of treatment with ULT including allopurinol, higher rates of non-adherence with ULT and higher baseline serum urate and lower odds of achieving target serum urate <6 mg/dl. To our knowledge, there are no studies investigating the reasons for poor medication adherence in African-Americans with gout.

Objectives: To examine the facilitators and barriers to adherence to urate-lowering therapy (ULT) in African-Americans with gout.

Methods: Nine nominal groups lasting 1-1.5 hour each were conducted in African-Americans with gout, six with low ULT and three with high ULT adherence (medication possession ratios of <0.89 or >0.90, respectively). Patients presented, discussed, combined and ranked ordered their concerns. A qualitative analysis was performed.

Results: 43 patients with mean age 63.9 years (standard deviation, 9.9), 67% men, participated in nine nominal groups (seven in men, two in women): African-American men (n=30); African-American women (n=13). The main facilitators to ULT adherence (three groups) were the recognition of the need to take ULT regularly to prevent gout flares, prevent pain from becoming chronic/severe and to have less dietary restriction; the lack of side effects from ULT; trust in physicians; and avoiding the need to seek emergent/urgent care for flares. Patients achieved high ULT adherence by organizing their pills using the pillbox and the incorporation of ULT intake into their routine to prevent forgetting. The main barriers to optimal ULT adherence were (six groups): doubts about effectiveness of ULT, concerns about cost and side effects, concomitant medications, forgetfulness, refilling the prescriptions on time, pill size and difficulty in swallowing, competing priorities, patient preference for alternative medicines (i.e. cherry juice) and frequent travel.

Conclusions: Identification of facilitators and barriers to high ULT adherence in African-Americans with gout in this study lays the foundation for designing interventions to improve ULT adherence in racial minorities.

Acknowledgements: This material is the result of work supported by a grant from the Division of Rheumatology at the University of Alabama at Birmingham and the resources and use of facilities at the Birmingham VA Medical Center, Alabama, U.S.A. The authors also support the publication of this paper from the Agency for Health Quality and Research Center for Education and Research on Therapeutics (CERT's), National Institute of Arthritis, Musculoskeletal and Skin Diseases (NIAMS), National Institute of Aging (NIA) and National Cancer Institute (NCI).

Disclosure of Interest: J. Singh Grant/research support: Takeda, savaed, Con-

sultant for: Takeda, saxenda, regeneron, allergan

DOI: 10.1136/annrheumdis-2014-eular.1148

SAT0520 | THE IMPACT OF GOUT ON PATIENT’S LIVES AND DIFFERENCES BY RACE AND GENDER: A PATIENT PERSPECTIVE
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Background: Little is known regarding the patient experience regarding the impact of gout on their lives, with most published qualitative studies assessing all aspects of gout, including treatment, knowledge, disease monitoring, outcomes and patient and clinician perspective, all in single studies. While these studies