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Background: Previous studies have shown that cardiovascular risk is increased in patients with gout. There are many studies on the effect of uric acid lowering therapy on CV risk in gout patients, but few studies have compared allopurinol and corbenzomarone.

Objectives: A nationwide population-based cohort study is designed to compare cardiovascular risk according to the treatment of allopurinol and benzbromaron in Korean gout patients.

Methods: We used South Korea’s database of the Health Insurance Review and Assessment service (HIRA) to identify gout patients 18 years of age or older who newly started allopurinol or benzbromaron between 2009 and 2015. The start date of allopurinol or benzbromaron is defined as the index date. We excluded patients who have been prescribed uric acid lowering agents or have been on dialysis for one year prior to the index date. During the study period, patients who used uric acid lowering agents other than allopurinol and benzbromaron or who used both drugs in combination were also excluded from the study. The primary outcome of the study was the occurrence of a composite cardiovascular endpoint, which included coronary revascularization, hospitalization due to MI, ischemic stroke, and transient ischemic attack (TIA). Cox proportional hazard regression analysis and Kaplan-Meier curves were used for the analysis.

Results: 257,097 allopurinol initiators and 7,868 benzbromaron initiators were included in the study. The mean age was 54.4 years, 86% were male. The mean annual number of drug prescriptions was 86.2 vs. 8.9 per 1000 person-years respectively for allopurinol initiators and 75.5% for benzbromaron initiators. In baseline, the benzbromaron initiator had more cardiovascular comorbidities and related drug administration than the allopurinol initiator. In allopurinol and benzbromaron initiators, the adjusted hazard ratio (aHR) of the composite CV endpoint was 1.01 (95% CI 0.83-1.21), which was not significantly different. No significant difference was found between the two groups in each of the items of the composite CV endpoint and hospitalization for heart failure. The results did not change even when we performed propensity score matching for baseline characteristics.

Conclusion: In our study, there was no significant difference in cardiovascular risk between allopurinol and benzbromaron initiator. High risk group of cardiovascular disease, there was no difference in risk between the two drugs.

Disclosure of Interests: None declared
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POS0313

ALTERED RISK OF GOUT ACCORDING TO CHANGE OF METABOLIC PARAMETERS IN YOUNG ADULTS

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Background: Many studies have shown a link between gout and metabolic syndrome (MetS). It is well known that lifestyle modifications such as weight reduction and abstinence from alcohol are effective in the treatment of gout, but data are lacking on how exactly the change of metabolic parameters affects gout.

Objectives: The purpose of this study was to investigate the relationship between gout risk and metabolic parameters in a nationwide population based young adult cohort, and to determine whether changes in metabolic parameters affect gout risk changes.

Methods: Among adults aged 20-39 years who participated in national health check-up programs from 2009 to 2012, a total of 6,290,914 subjects were included in the study, excluding subjects who were previously diagnosed with gout. To determine the effect of changes in metabolic parameters on gout incidence, 2,701,138 check-up programs from 2009 to 2012, a total of 6,290,914 subjects were included to mine the effect of changes in metabolic parameters on gout incidence, 2,701,138 check-up programs from 2009 to 2012, a total of 6,290,914 subjects were included in the study. The mean age was 54.4 years, 86% were male. The mean annual number of drug prescriptions was 86.2 vs. 8.9 per 1000 person-years respectively for allopurinol initiators and 75.5% for benzbromaron initiators. In baseline, the benzbromaron initiator had more cardiovascular comorbidities and related drug administration than the allopurinol initiator. In allopurinol and benzbromaron initiators, the adjusted hazard ratio (aHR) of the composite CV endpoint was 1.01 (95% CI 0.83-1.21), which was not significantly different. No significant difference was found between the two groups in each of the items of the composite CV endpoint and hospitalization for heart failure. The results did not change even when we performed propensity score matching for baseline characteristics.

Conclusion: In our study, there was no significant difference in cardiovascular risk between allopurinol and benzbromaron initiator. High risk group of cardiovascular disease, there was no difference in risk between the two drugs.

Disclosure of Interests: None declared
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POS0319

TWÖ-YEAR REDUCTION OF URATE LOAD IN DUAL-ENERGY CT DURING A TREAT-TO-TARGET APPROACH IN GOUT PATIENTS: RESULTS FROM A LONGITUDINAL STUDY (NOR-GOUT)

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Background: Dual-energy computed tomography (DECT) detects urate depositions, and is included in the ACR/EULAR classification criteria for gout. There is lack of longitudinal studies in large population cohorts on urate deposition measured by DECT during urate lowering therapy (ULT).

Objectives: To explore by DECT the longitudinal changes urate depositions during a treat-to-target approach in gout with ULT.

Methods: In a prospective observational study, patients with crystal-proven gout were included if they presented after a recent gout flare and with increased serum urate levels (>360 μmol/L/>6mg/dl). In a treat-to-target approach they received ULT with escalating drug doses with monthly follow-up during the first year until the treatment target was met with serum urate <360 μmol/L or 360 μmol/L if tophi. A DECT scanner (General Electric Discovery CT750 HD) acquired data from bilateral forefeet and ankles at 80 KW and 140 KV, processed with a software with a 2-material decomposition algorithm which colour codes urate. Follow-up DECT was performed after one and two years.

Results: We used South Korea’s database of the Health Insurance Review and Assessment service (HIRA) to identify gout patients 18 years of age or older who newly started allopurinol or benzbromaron between 2009 and 2015. The start date of allopurinol or benzbromaron is defined as the index date. We excluded patients who have been prescribed uric acid lowering agents or have been on dialysis for one year prior to the index date. During the study period, patients who used uric acid lowering agents other than allopurinol and benzbromaron or who used both drugs in combination were also excluded from the study. The primary outcome of the study was the occurrence of a composite cardiovascular endpoint, which included coronary revascularization, hospitalization due to MI, ischemic stroke, and transient ischemic attack (TIA). Cox proportional hazard regression analysis and Kaplan-Meier curves were used for the analysis.

Results: 257,097 allopurinol initiators and 7,868 benzbromaron initiators were included in the study. The mean age was 54.4 years, 86% were male. The mean annual number of drug prescriptions was 86.2 vs. 8.9 per 1000 person-years respectively for allopurinol initiators and 75.5% for benzbromaron initiators. In baseline, the benzbromaron initiator had more cardiovascular comorbidities and related drug administration than the allopurinol initiator. In allopurinol and benzbromaron initiators, the adjusted hazard ratio (aHR) of the composite CV endpoint was 1.01 (95% CI 0.83-1.21), which was not significantly different. No significant difference was found between the two groups in each of the items of the composite CV endpoint and hospitalization for heart failure. The results did not change even when we performed propensity score matching for baseline characteristics.

Conclusion: In our study, there was no significant difference in cardiovascular risk between allopurinol and benzbromaron initiator. High risk group of cardiovascular disease, there was no difference in risk between the two drugs.

Disclosure of Interests: None declared
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POS0141

ACTIVE SCREENING FOR GOUT IDENTIFY A LARGER CARDIOVASCULAR POPULATION AT HIGH MORTALITY RISK

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Background: We have recently revealed by active screening that about a third of gout cases in the cardiovascular population is not registered in records [1], highlighting the value of field studies.

Objectives: To assess whether gout screening in patients hospitalized for cardiovascular events may also help identify patients at higher risk of mortality after discharge.

Methods: A retrospective cohort field study, carried out in 286 patients admitted for cardiovascular events in the Cardiology, Neurology and Vascular Surgery units of a tertiary centre in Spain. The presence of gout was established by records review and face-to-face interview, according to the 2015 ACR/EULAR criteria. The occurrence of mortality during follow-up and its causes were obtained from electronic medical records. The association between gout and subsequent mortality was tested using Cox regression models. Whether covariates affect the gout-associated mortality was also studied.

Results: Of 286 patients recruited at baseline, 17 were excluded due to loss of follow-up (>6mo), leaving a final sample of 269 patients (93.6%). Thirty-six cases (14.5% of the sample) were classified as having gout: twenty-three (63.9%) had a previously registered diagnosis, while 13 (36.1%) had not and was established by the interview. After discharge, the mean follow-up was 19.9 months (SD ±6.8), with a mortality incidence of 21.6 deaths per 100 patient-years, 34.2% by cardiovascular causes. Gout significantly increased the risk of subsequent all-cause mortality, with a hazard ratio (HR) of 2.01 (95% CI 1.13 to 3.58). When the analysis was restricted to gout patients with registered diagnosis, the association remained significant (HR 2.89; 95% CI 1.54 to 5.41).

The adjusted HR for all-cause mortality associated with gout was 1.86 (95% CI 1.01-3.40). Regarding the causes of death, both cardiovascular and non-cardiovascular were numerically increased. Secondary variables rising the mortality risk in those with gout were age (HR 1.07; 1.01 to 1.13) and coexistent renal disease (HR 4.70; 1.31 to 16.84), while gender, gout characteristics and traditional risk factors showed no impact.

Conclusion: Gout was confirmed an independent predictor of subsequent all-cause mortality in patients admitted for cardiovascular events. Active screening for gout allowed identifying a larger population at high mortality risk, which may help tailor optimal management to minimize the cardiovascular impact.

REFERENCES:

POS0142

MINIMAL DISEASE ACTIVITY IN PATIENTS WITH PSORIATIC ARTHRITIS AND ASSOCIATED FACTORS: REAL LIFE DATA FROM A SINGLE CENTER

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Background: Psoriatic arthritis (PsA) is a heterogeneous disease and GRAPPA have proposed Minimal disease activity (MDA) as a composite outcome measure and has been validated in PsA.

Objectives: In this study, we aimed to evaluate the characteristics, MDA frequencies, first biological disease modifying antirheumatic drugs (b-DMARD) continuation rate and associated factors in our PsA cohort.

Methods: PsA patients who fulfilled the CASPAR classification criteria and had at least six months of follow-up data were evaluated cross-sectionally for MDA. Clinical data were collected from patient charts with standard forms. b-DMARD treatment was initiated in patients who did not respond to at least one conventional synthetic (cs)