one of the 3 criteria. Patients with spine deformation were older ($p=0.043$), with higher BMI ($p=0.004$) and had a trend to be more hypogonadal ($p=0.06$). Concerning quality of life, AcroQoL's average was 70.9% (score 0 to 100, maximal quality of life =100, range 32-98), HAQ's average was 0.18 (score 0 to 3, maximal quality of life 0, range 0-1.38) and Oswestry's average was 9.8 (score 0 to 100, maximal quality of life 0, range 0-44).

Conclusion: This study shows for the first time that acromegaly patients are not at an increased risk of vertebral fractures. This result differs from the literature that reported more than 30% of VF in this population. Our study bring several points of explanation. First, the vertebral abnormalities were frequent in our patients and can overestimate the VFs without a qualitative analysis of the X-ray. Secondly, the right endocrine balance plays an important role in osteoporosis. Our patients were well supplemented, it can reduce the risk of osteoporosis. More studies are needed to confirm this new hypothesis.

REFERENCE

- [1] Claessen and al. 2016. « Bone and Joint Disorders in Acromegaly ». *Neuroendocrinology* 103 (1):86–95.

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AB0883

SYSTEMIC INFLAMMATION AND ATHEROSCLEROSIS IN PATIENTS WITH GOUT. RESULTS FROM THE NOR-GOUT STUDY

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Background: The association between gout and cardiovascular disease (CVD) is well known,¹ whereas mechanisms behind this association are poorly understood.

Objectives: This study aimed to evaluate factors associated with asymptomatic carotid atherosclerosis in patients with gout.

Methods: In this prospective study patients with crystal-proven gout were included after a recent disease flare, if the serum urate level was >360 $\mu\text{mol/L}$ (>6 mg/dl). We analysed baseline data in patients without established CVD who were referred to a CVD risk evaluation, including ultrasound of the carotid arteries, blood pressure measurement and laboratory tests. Carotid atherosclerotic plaques were defined in the longitudinal view as protrusions into the lumen of ≥ 1.5 mm or at least 2 times the adjacent intima-media thickness according to the Mannheim criteria.

Results: Of the 79 gout patients included, approximately 10% were females, and mean (SD) age was

52.1 $\pm$ 13.1 years. Thirty-two (40.5%) had carotid plaques (Table). Only 9.3% were current smokers, while mean (SD) body mass index was high (29.1 $\pm$ 4.7 kg/m²). Lipids were in the normal range, with a mean (SD) total cholesterol at 5.3 $\pm$ 1.09 mmol/L and low density lipoprotein cholesterol 3.12 $\pm$ 0.95 mmol/L. Systolic blood pressure was in the normal range 134.0 $\pm$ 15.1 mmHg, although 29.1% of the patients were treated with anti-hypertensive agents. In univariate analyses, higher age, hypertension and higher erythrocyte sedimentation rate (as a marker of systemic inflammation) were significantly associated with the presence of carotid plaques ($p=0.01$ and $p=0.04$, respectively) (Figure). Serum urate levels or disease duration were not associated with carotid plaques ($p=0.27$ and $p=0.44$, respectively).

Conclusion: Our results indicate an association between systemic inflammation and atherosclerosis in patients with gout. To be able to efficiently prevent CVD in this patient group, prospective studies with larger sample sizes are needed to elucidate the mechanisms behind the increased risk of CVD in gout patients.

Table. Patient characteristics

Number n (%)	79 (100.0)	32 (40.5)	47 (59.5)	-
Age (years) mean $\pm$ SD	52.1 $\pm$ 13.1	60.0 $\pm$ 10.4	46.7 $\pm$ 12.1	
Sex male/female n (%)	72/7 (91.1)/(8.9)	28/4 (87.5)/(12.5)	44/3 (93.6)/(6.4)	0.43
Disease duration (median IQR)	6.0 (3.0-12.0)	6.0 (3.8-14.3)	5.0 (2.0-10.0)	0.44
CV risk factors				
Smoking n (%)	7 (9.3)	2 (2.7)	5 (6.7)	0.69
BMI mean $\pm$ SD	29.1 $\pm$ 4.7	28.5 $\pm$ 4.2	29.5 $\pm$ 5.0	0.35
TC (mmol/L) mean $\pm$ SD	5.3 $\pm$ 1.09	5.21 $\pm$ 1.18	5.39 $\pm$ 1.02	0.48
LDL-c (mmol/L) mean $\pm$ SD	3.12 $\pm$ 0.95	3.24 $\pm$ 1.07	3.04 $\pm$ 0.84	0.41
BP systolic (mm Hg) mean $\pm$ SD	134.0 $\pm$ 15.1	138.0 $\pm$ 16.2	131.3 $\pm$ 13.9	0.06
BP diastolic (mm Hg) mean $\pm$ SD	82.8 $\pm$ 8.0	83.6 $\pm$ 6.9	82.3 $\pm$ 8.8	0.46
Co-morbidities n (%)				
Hypertension	36 (45.6)	21 (26.6)	15 (19.0)	0.01
Diabetes	4 (5.1)	3 (3.8)	1 (1.3)	0.30
Biomarkers mean $\pm$ SD				
S-urate ($\mu\text{mol/L}$)	495.6 $\pm$ 84.0	481.8 $\pm$ 97.5	504.9 $\pm$ 73.2	0.27
ESR (mm/h)	12.9 $\pm$ 13.9	17.3 $\pm$ 17.6	9.8 $\pm$ 9.7	0.04
CRP (mg/L) median (IQR)	3.5 (2.0-7.8)	5.0 (2.0-13.5)	3.0 (1.0-6.0)	0.09

Figure. Association of carotid plaques and systemic inflammation

REFERENCES

- [1] Choi HK, Curhan G. Independent impact of gout on mortality and risk of coronary heart disease. *Circulation* 2007;116:894-900.

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CLINICAL AND DEMOGRAPHIC CHARACTERISTICS OF PATIENTS WITH OCHRONOTIC ARTHROPATHY

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Background: Alkaptonuria (AKU) is a metabolic disorder that causes accumulation of oxidized homogentisic acid (HGA) in the connective tissues. The excessive deposition of HGA and its metabolites can cause