Overall there was a high intragroup heterogeneity ($p=0.00$) caused by geographical area and study design.

Graph 2. Forest plot of incidence of axial spondyloarthritis compared before and after introduction of new classification criteria in 2009

Conclusion: Rheumatoid arthritis is the most frequent IA diagnosis in newly referred patients, of which the incidence increased over time up to 15%. The introduction of new classification criteria might have introduced higher incidence rates for IA, although heterogeneity could have influenced the results.

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SAT0603

SYSTEMIC SCLEROSIS IS AN INDEPENDENT RISK FACTOR FOR ISCHEMIC HEART DISEASE WITH AN ADDITIONAL RISK IN THOSE POSITIVE FOR CERTAIN ANTI-PHOSPHOLIPID ANTIBODIES: A VERY LARGE CASE-CONTROL STUDY

A. Watad¹, D. McGonagle², N. L. Bragazzi³, D. Comanesther⁴, A. Cohen⁴, M. Lidar⁵, H. Amital¹. ¹Sheba Medical Center, Department of Medicine B, Rheumatology Unit, Ramat Gan, Israel; ²Leeds Musculoskeletal Biomedical Research Unit, Leeds, United Kingdom; ³University of Genoa, Genova, Italy; ⁴Clalit Health Services, Tel Aviv-Yafo, Israel; ⁵Sheba Medical Center, Rheumatology Unit, Ramat Gan, Israel

Background: A higher prevalence of ischemic heart disease (IHD) in patients with systemic sclerosis (SSc) was reported. However, contrasting findings were published concerning the role of SSc-related autoantibodies in IHD risk which remains controversial.

Objectives: The current study explored the link between SSc and IHD, impact of putative links on SSc mortality and the role of SSc-related and antiphospholipid autoantibodies in disease associated IHD.

Methods: A large cohort study utilising the Clalit-Health-Service (CHS) database was conducted on 2,431 SSc patients and 12,710 age- and sex matched controls. The proportion of IHD was compared between patients diagnosed with SSc and age- and gender-matched controls. The role of

SSc-linked and antiphospholipid autoantibodies in disease associated IHD was assessed.

Results: The rate of IHD was significantly higher in SSc than controls (20.4% vs 15.0%, $p<0.001$). At the multivariate analysis, SSc was an independent predictor of IHD with an OR of 1.91 (95%CI 1.57-2.31, $p<0.0001$). SSc patients with IHD had a higher mortality rate with an HR of 2.67 (95%CI 2.03-3.53, $p<0.0001$) than those without IHD. SSc patients with positive anti-beta2GPI (IgM-isotype) or anti-cardiolipin (aCL) (IgA-isotype) exhibited a higher risk of IHD than SSc patients without these antibodies with an OR 1.89 (95% 1.04-3.45, $p=0.0369$) and OR of 3.72 (95% 1.25-11.11, $p=0.0184$), respectively.

Conclusion: Patients with SSc are at higher risk for developing IHD with an additional risk for the latter in those positive for aCL or anti-beta2GPI. A high degree of suspicion is needed during routine patient follow-up and pre-emptive screening should be considered.

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SAT0604

FAST FOOD HABITS AND SERUM URATE CHANGE IN YOUNG ADULTS: 15-YEAR PROSPECTIVE ANALYSIS

C. Yokose^{1,2}, L. Lu³, N. McCormick^{1,2,3}, J. Choi¹, Y. Zhang^{1,2}, H. Choi^{1,2}.

¹Massachusetts General Hospital, Division of Rheumatology, Allergy, and Immunology, Boston, United States of America; ²Massachusetts General Hospital, Clinical Epidemiology Program, Mongan Institute, Boston, United States of America; ³Arthritis Research Canada, Richmond, Canada

Background: Fast food consumption has strong positive associations with weight gain and insulin resistance.¹ Obesity and insulin resistance are in turn strongly associated with elevated serum urate (SU) levels, largely mediated by insulin's anti-uricosuric ability.²

Objectives: To investigate the relation between fast food consumption and changes in SU over a 15-year period among young black and white adults in the United States.

Methods: Participants for the CARDIA study included 3,122 young (age 18-30 years in 1985-86) black and white adults in the United States who were followed up with repeated dietary and clinical assessments and had both baseline and year 15 SU measurement available. Frequency of fast food consumption (fast food frequency, FFF) was quantified on a semicontinuous scale and classified as <1, 1-2, or >2 times per week. We used multivariable linear regression models to investigate the association of FFF at baseline as well as change in FFF with 15-year changes in SU.

Results: Our analysis included data from 3,122 subjects who had SU data available both at baseline and year 15 (Table 1). After adjustment for age, sex, education, baseline height and weight, and baseline SU, baseline FFF (defined as 3 times per week year 0 differences between participants) was independently associated with increases in SU among both black ($\beta=0.11$, $p=0.04$) and white ($\beta=0.11$, $p=0.01$) individuals (Table 2). Change in FFF (defined as 3 times a week 15-year change within participants) was also independently associated with increases in SU among white ($\beta=0.09$, $p=0.01$) individuals but not blacks ($\beta=0.03$, $p=0.93$) (Table 2). There was a significant correlation between weight change and SU change (correlation coefficient 0.34, $p<0.001$). Figure 1 depicts the joint associations of year 0 FFF and 15-year changes in FFF with change in weight. Compared to the average 15-year SU change among participants with baseline FFF <1 time per week and 15-year FFF change <0 time per week, those with high FFF at both baseline and follow-up had an extra 0.21 mg/dL increase (i.e., 75% of overall population SU increase over 15 years [0.28 mg/dL]) in SU during that time. After adjusting for covariates in model 2, change in weight ($\beta=0.03$, $p<0.001$) and homeostasis model for insulin resistance (HOMA) ($\beta=0.05$, $p<0.001$) remained significantly associated with SU change.

Table 1. Participant Characteristics

Characteristic	Blacks (n=1468)	Whites (n=1654)
Age, years (year 0)	24.4 (3.8)	25.6 (3.3)
Male (%)	44	48
Weight, kg (year 0)	72.8 (16.7)	70.0 (14.0)
Weight, kg (year 15)	87.9 (20.9)	80.7 (18.6)
Serum urate, mg/dL (year 0)	5.1 (1.4)	5.4 (1.4)
Serum urate, mg/dL (year 15)	5.6 (1.4)	5.5 (1.4)

All values reported as mean (SD) unless otherwise noted.