development of clinical disease and associated changes in immune status, gut and energy homeostasis.

Results Animals fed a HFD showed lower autoantibody titres going along with an improved overall survival and a tendentially lower infiltration of the kidney by leukocytes. Beneficial clinical effects were reflected in systemic immunologic changes, as the distribution and differentiation of main immune cell subsets in HFD animals more closely resembled that of yet healthy animals. We assume that most probably a complex interplay of different fiber-associated effects underlies these favorable effects. This may involve intestinal leakage and bacterial translocation that were increased in LFD animals. Further, LFD animals showed a significant increase in body weight and white adipose tissue expressing more leptin and inflammatory cytokines. We are currently testing, if the observed beneficial effects may also be attributed to an increased fermentation of dietary fibre into SCFA. SCFA intersect in various ways and at different sites with the immune system and mostly have anti-inflammatory effects.

Conclusion Altogether, we think that intake of dietary fiber affects immune status, gut and energy homeostasis. These may be interlinked and affect each other, inflicting more or less systemic chronic inflammation promoting lupus pathology.

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P56 RHUPUS SYNDROME IN A TERTIARY HOSPITAL

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Background/Purpose Rhupus syndrome (RhS) is a rare combination of Rheumatoid Arthritis (RA) and Systemic Lupus Erythematosus (SLE). Different studies describe RhS cases that begin with erosive arthritis and the presence of rheumatoid factor (RF) and/or anti CCP and then the SLE symptoms.

Despite the fact that RhS shows a low prevalence, it would be useful to know clinical characteristics of RhS patients since their therapy and outcome differ from those having RA or SLE alone.

Methods Retrospective study with systematic revision of electronic clinical records of RhS patients was performed. Demographic, clinical and immunological data were collected.

Results Eight RhS patients were included (all fulfilled SLICC 2012 criteria for SLE and ACR 2010 for RA). Mean age was 67.3 (45–84) years (7 were female).

In 3 cases RA was the first diagnosis with a mean evolution of 4.5 years until SLE diagnosis. In contrast, in 5 cases SLE was the first diagnosis with a mean evolution of 7.2 years until RA diagnosis. Photosensitivity and arthritis were the predominant clinical manifestations. One patient presents pericarditis and other case showed rheumatoid nodules in elbows. Renal, pulmonary or neurological affection was not reported.

4 patients were under biological/JAK inhibitors therapies (2 abatacept, 1 rituximab and 1 baricitinib) with favorable response of treatment.

Conclusions In contrast to other series, only the 37.5% of our RhS cases begins with polyarticular seropositive arthritis. The 62.5% started with SLE symptoms as haematological alterations, cutaneous and serological manifestation, and showed longer progression to have polyarticular affection. Thus, RhS diagnosis is earlier in patients that begin with RA symptoms. 4 RhS patients were refractory to DMARD treatments, where biological/JAK inhibitors therapies are needed.

P57 SMOKING AND PRIMARY CHRONIC CUTANEOUS LUPUS: WHO ARE THE MOST VULNERABLE?

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Background/Purpose Chronic Cutaneous Lupus Erythematosus (CCLE), including discoid lupus, often leads to scarring and disproportionately afflicts African American (AA) people. Smoking worsens the severity of skin lupus and is highly prevalent in those from disadvantaged groups. We examined sociodemographic disparities in tobacco smoking among patients with CCLE confined to the skin (primary CCLE [pCCLE]).

Methods Cross-sectional study of adults with dermatologist-diagnosed pCCLE consented into the Georgians Organized Against Lupus (GOAL) Cohort. GOAL is a population-based lupus cohort established in the Southeastern US, where there is a large AA, socioeconomically disadvantaged population. pCCLE were classified as never smokers (NS, <100 lifetime cigarettes), former smokers (FS, ≥100 lifetime cigarettes and not currently smoking), and current smokers (CS, ≥100 lifetime cigarettes and currently smoking). We created a Disadvantage Score (DScore) by attributing 1 point to each of the following: living below the federal poverty level, ≤ high school education, self-reported AA race, unemployed/disabled, self-perceived discrimination, and moderate/severe depression. We examined the association of DScore with active smoking (CS vs NS) and smoking cessation (CS vs FS).

Results Among 124 patients (86% females, 82% AA), the prevalence of NS, FS, and CS was 53%, 16%, and 31%, respectively. In multivariate models adjusting for age, sex and dermatology visits (table 1), the odds of CS (vs NS) increased significantly as the DScores increased (OR=3.9 and

Abstract P57 Table 1 Association of tobacco smoking status with disadvantage score among adults with Primary CCLE. Multivariate Analysis*

Disadvantage score [^]	CS vs NS OR (95% CI)	P-value	CS vs FS OR (95% CI)	P-value
0–1	(Ref)	(Ref)	(Ref)	(Ref)
2–3	3.9 (1.1–13.3)	0.03	6.9 (1.5–31.7)	0.01
4–6	9.3 (2.5–34.6)	0.003	7.6 (1.6–35.6)	0.004

*Multivariate logistic regression adjusted for significant confounders (age, gender, and dermatology visits). [^]Disadvantage score represents the sum of 1 point for each of the following characteristics: living below the federal poverty level, ≤ high school, African American race, unemployed/disabled, self-perceived discrimination, moderate to severe depressive symptoms.

Abbreviations: NS=Never Smoker; FS=Former Smoker; CS=Current Smoker; OR=Odds Ratio; CI=Confidence Interval; ref=Reference Group.

OR=9.3 for adults with DScores of 2–3 and 4–6 [compared with DS 0–1], respectively). Odds of CS (vs FS) were also higher with higher DScores (OR=6.9 and OR=7.6 for adults with a DS of 2–3 and 4–6 [compared with DS 0–1], respectively).

Conclusion Smoking is highly prevalent in patients with pCCLE. DScores were positively associated with CS and inversely associated with FS. Smoking cessation is particularly important for adults with pCCLE, and such efforts should target individuals from the most disadvantaged sociodemographic groups.

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SYSTEMIC LUPUS ERYTHEMATOSUS IN NATIVE SUB-SAHARAN AFRICANS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background This systematic review of literature and meta-analysis aimed to determine the prevalence, phenotype and treatment of systemic lupus erythematosus (SLE) in Native sub-Saharan Africans.

Methods PubMed, EMBASE, Web of Science, African Journals Online, and Global Index Medicus as well as references of retrieved papers were searched to select studies addressing SLE in Native sub-Saharan Africans and published during January 1, 2008- October 7, 2018. Results were pooled through narrative review and random-effects model. Heterogeneity (I^2) was assessed via the χ^2 test. Pooled estimates are expressed

with 95% confidence intervals. This study is registered with PROSPERO: registration number CRD42019139226.

Results Fifteen hospital-based studies were included out of 1502 records. The pooled prevalence of SLE was 1.7% (0.8–2.9). The mean age at diagnosis ranged from 28.8 to 39.2 years. The female proportion was 88%–100%. Rheumatological (5.1%–99.9%), dermatological (4.3%–100%) and hematological (1.4–86.9%) manifestations were the commonest. Patients had a high seroprevalence for anti-ribonucleoprotein 57.9% (36.4–77.9), anti-Smith 53.5% (40.4–66.2), anti-Sjogren syndrome antigen A 45.6% (19.2–73.4) and anti-Sjogren syndrome antigen B 33.7% (13.6–57.6) autoantibodies. The most used treatments were corticosteroids 99% (94.9–100) and antimalarials 62.8% (23.3–94.1). The pooled mortality rate was 10.3% (3.3–20.6); mainly due to infections, kidney and neurological involvement.

Conclusions Over the last 30 years, SLE was not rare among Native sub-Saharan Africans and its featured characteristics were earlier onset, female predominance, and high seropositivity for extractable nuclear antigen autoantibodies. The standard treatments were corticosteroids and antimalarials. The mortality rate was high. Population prevalence and incidence as well as full description of SLE characteristics in Native sub-Saharan Africans are needed.

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PREDICTORS OF RENAL SURVIVAL IN A COHORT OF PATIENTS WITH LUPUS NEPHRITIS WITH MORE THAN 30 YEARS OF FOLLOW-UP

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Background Despite the improvement in survival of patients with lupus nephritis (LN) over the last decades, LN is associated with progression to end-stage renal disease (ESRD) in a significant proportion of patients. We aimed to investigate the factors influencing renal survival in patients with LN.

Abstract P59 Figure 1 Kaplan-meier curves showing cumulative renal survival for patients with LN