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 tenden-
tiously lower infiltration of the kidney by leukocytes. Benefi-
cial 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 inter-
sect 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.

Acknowledgment This work was supported by the B. Braun
Stiftung, the Forschungskommission Freiburg and the Ministry
of Science, Research, and Arts Baden-Württemberg (Margarete
von Wrangell Programm).

P56 RHUPUS SYNDROME IN A TERTIARY HOSPITAL
Isabel Martinez-Cordellat, Roxana González-Mazario, Marta De-la-Ruìba-Navarro, Cristobal Pavez-Perales, Samuel Leal-Rodriguez, José Ivorra-Cortes, Inmaculada Chalmeta-Verdejo, Elena Grau-Garcia, Cristina Alcañiz-Escandell, Jorge Juan Fragio-Gil, Luis González-Pui, Rosa Negueroles-Albavec, José Elío Oliver-Rodríguez, Francisco Miguel Ortiz-Sanjuan, Elvira Vicens-Bernabeu, Carmen Nájera-Herranz, Inés Cánovas-Olmos, José Andrés Román-Ivorra, Reumatología Dept., HUP La Fe, Valencia, Spain

10.1136/lupus-2020-eurolupus.103

Background/Purpose Rhupus syndrome (RhS) is a rare combi-
nation 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 elec-
tronic clinical records of RhS patients was performed. Demo-
graphic, 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 pre-
dominant clinical manifestations. One patient presents pericar-
ditis and other case showed rheumatoid nodules in elbows.
Renal, pulmonary or neurological affection was no reported.

4 patients were under biological/JAK inhibitors therapies (2
abacatcept, 1 rituximab and 1 baricitinib) with favorable

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 altera-
tions, 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?
1Cristina Drenkard, 2Laura Aspey, 3Charles Helmick, 1Gao-bin Bao, 1S Lim, 1Division of
Rheumatology, Emory University, Atlanta; 1Dept. of Dermatology, Emory University, Atlanta;
1Centers for Disease Control and Prevention, Division of Population Health, Atlanta, USA

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 but
not currently smoking), and current smokers (CS, ≥100 life-
time cigarettes and currently smoking). We created a Disad-
vantage 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 depressive
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

<table>
<thead>
<tr>
<th>Disadvantage Score*</th>
<th>CS vs NS (OR (95% CI))</th>
<th>P-value</th>
<th>CS vs FS (OR (95% CI))</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–1</td>
<td>(Ref)</td>
<td>(Ref)</td>
<td>(Ref)</td>
<td>(Ref)</td>
</tr>
<tr>
<td>2–3</td>
<td>3.9 (1.1–13.3)</td>
<td>0.03</td>
<td>6.9 (1.5–31.7)</td>
<td>0.01</td>
</tr>
<tr>
<td>4–6</td>
<td>9.3 (2.5–34.6)</td>
<td>0.003</td>
<td>7.6 (1.6–35.6)</td>
<td>0.004</td>
</tr>
</tbody>
</table>

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

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

Lupus Sci Med. first published as 10.1136/lupus-2020-eurolupus.104 on 23 March 2020. Downloaded from http://lupus.bmj.com/ Lupus Sci Med: first published as 10.1136/lupus-2020-eurolupus.104 on 23 March 2020. Downloaded from...
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.

Acknowledgements The GOAL Cohort is supported by the Centers for Disease Control and Prevention (CDC) Grant 1U01DP005119. The content of this research is solely the responsibility of the authors and does not necessarily represent the official views of the CDC. The authors have no conflicts of interest to declare.

P58 SYSTEMIC LUPUS ERYTHEMATOSUS IN NATIVE SUB-SAHARAN AFRICANS: A SYSTEMATIC REVIEW AND META-ANALYSIS
1Mickael Essouma, 1Jan René Nkeck, 2Francky Teddy A Endomba, 3,4Jean Joel Bigna, 1Madeleine Singwe-Ngandeu, 6Eric Hachulla. 1Faculty of Medicine and Biomedical Sciences, University of Yaoundé I, Yaoundé, Cameroon; 2University of Bourgogne, Dijon, France; 3Centre Pasteur of Cameroon, Yaoundé, Cameroon; 4Faculty of Medicine, University of Paris Sud XI, Le Kremlin-Bicêtre, France; 5Yaoundé Central Hospital, Yaoundé, Cameroon; 6Claude Huriez Hospital, Lille University, Lille, France

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 (I²) was assessed via the χ² 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.

P59 PREDICTORS OF RENAL SURVIVAL IN A COHORT OF PATIENTS WITH LUPUS NEPHRITIS WITH MORE THAN 30 YEARS OF FOLLOW-UP
1Filipa Farinha, 2Ruth J Pepper, 3Daniel G Oliveira, 1Thomas McDonnell, 1David A Isenberg, 1Anisur Rahman. 1Centre for Rheumatology, University College London, London; 2Centre for Nephrology, University College London-Royal Free Campus, London, UK; 3Internal Medicine Dept., Centro Hospitalar e Universitário do Porto, Porto, Portugal

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.