Methods Nailfold of two patients with dermatomyositis were examined using dermatoscopy, (dermlite 3, 3 gen, USA.) MDA5 positivity was confirmed by ELISA.The findings were imaged using I pad mini (apple, USA). The images were compared to the patient with Jo-1, those with TIF1, or centromere.

Results Marked haemorrhages and enlarged capillaries were observed in almost all nailfolds of both hands, while only upto three nailfolds in patients with antibodies against Jo-1, TIF1, or centromere. However, loss of capillaries was not detected under the dermatoscopy at all, while these were detected in capillary scope in the literature in anti-MDA5 antibody positive patients.

Conclusions The results of the current study suggest that nailfold findings using dermatoscopy have a potential to diagnose the patients anti-MDA5 antibodies at their first visit, although there is a limitation in number of patient samples in this study. Likewise, the nailfold findings on dermatoscopy may provide visible information for the pathogensis of interstitial pneumonitis in these patients as well.

Abstract 286 Figure 1   Environmental Organic Chemicals detected in SLE patients

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| 286 | IDENTIFYING EXPOSURES TO CHEMICALS IN PATIENTS WITH SLE – "A NON-TARGETED EXPOSOME APROACH" |

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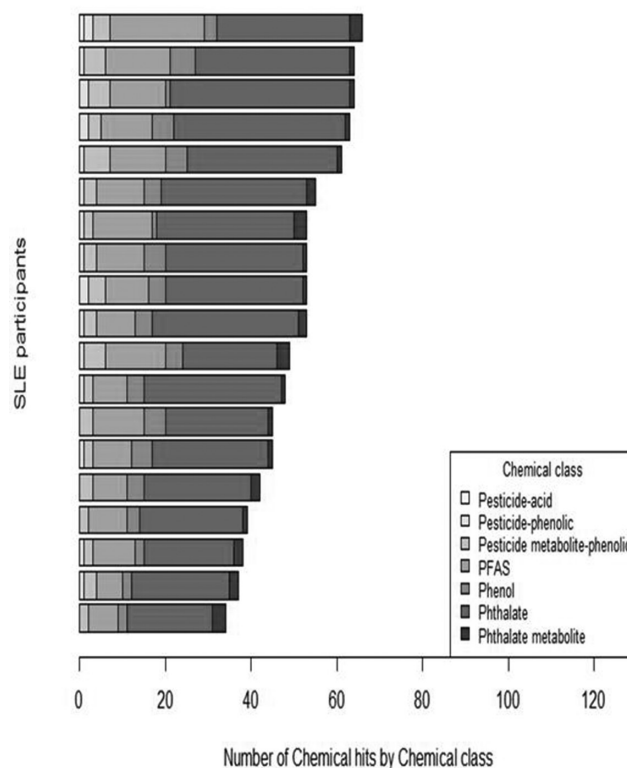
Background and aims Environmental exposures may play a substantial role in the pathogenesis of SLE. It recently became possible to identify and quantify a person's exposure to environmental chemicals ("the exposome") in a comprehensive fashion. This non-targeted approach has no a priori selection of chemicals. The goal of this study is to characterise multiple organic chemicals in a cohort of SLE patients and controls.

Methods Patients from the California Lupus Epidemiology Study and healthy controls were studied. Banked serum was analysed by Liquid Chromatography Quadruple Time-of-Flight Mass Spectrometry (**LC-QTOF/MS**). Data acquired by LC-QTOF/MS includes the molecular weights of all detected parent and daughter ions, as well as retention times and peak areas. This non-targeted screening allows rapid identification of potential hits. The results of the LC-QTOF/MS analysis are matched into a database of 740 potentially detected environmental organic chemicals [EOC].

Results We present preliminary data on 19 patients with SLE and 43 controls. 193 potential EOC hits were found in patients with SLE and 417 were found in controls. In SLE patients, the number of chemicals detected per participant ranged from 34–66, with an average of 50 hit matches. Pthalates and its metabolites were the most represented chemicals, with >50% of detected compounds in SLE. (Figure 1) Compounds of relevance include several endocrine disruptors such as Bisphenol A and Methoxyclor.

Conclusions Patients with SLE are exposed to a wide range of chemicals. LC-QTOF/MS can identify a wider range of potential chemical exposures in SLE, and aid in prioritising chemicals for further research and interventions.

| 287 | RISK FACTORS FOR AND COMPONENTS OF METABOLIC SYNDROME: A STRUCTURAL EQUATION MODELLING ANALYSIS OF THE QUALITY OF LIFE OF PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS |

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Background and aims This study assessed: (1) the relationships among the risk factors for and components of metabolic syndrome (MetS) and health-related quality of life (HRQOL), and (2) the effects of these variables on HRQOL in a hypothesised causal model using structural equation modelling (SEM) in patients with systemic lupus erythematosus (SLE).

Methods Of the 505 SLE patients enrolled in the Korean Lupus Network (KORNET registry), 244 had sufficient data to assess the components of MetS at enrollment. Education level, monthly income, corticosteroid dose, Systemic Lupus Erythematosus Disease Activity Index, Physicians' Global Assessment, Beck Depression Inventory, MetS components, and the Short Form-36 at the time of cohort entry were determined. SEM was used to test the causal relationship based on the Analysis of Moment Structure.

Results The average age of the 244 patients was 40.7 ± 11.8 years. The SEM results supported the good fit of the model ($\chi^2 = 71.629$, p=0.078, RMSEA 0.034, CFI 0.972). The final