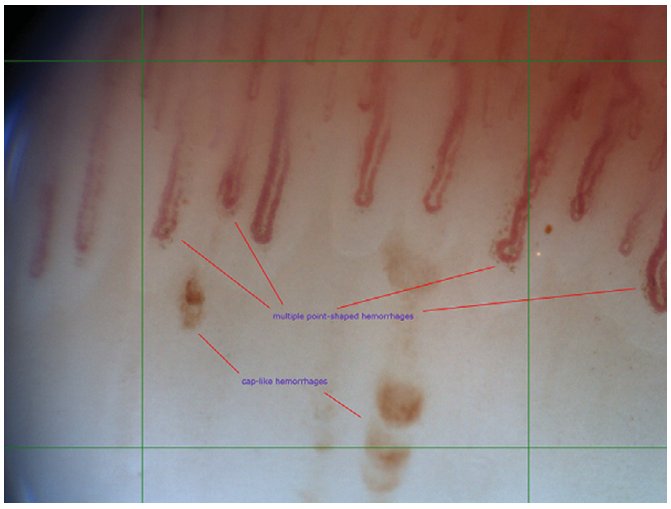
(>8 per patient) abnormal shapes in 60% (n=12), apical dilatations in 90% (n=18). Total count of large/small point shaped hemorrhages was 109/855, with a mean of 0.2/1.6 per analyzed image/per patient. These were detected in 85/85% of patients (n=17)



Conclusions: In this pilot (n=20) of cSLE patients, all showed capillary abnormalities. The most striking finding was the point-shaped bleeding surrounding the capillary, observed in 85% (n=17) of our patients. Prospective longitudinal cohort studies in children through the EULAR study group on microcirculation in Rheumatic diseases will elucidate whether specific findings can be found in child rheumatic diseases

References:

[1] Cutolo M. Atlas of capillaroscopy in rheumatic diseases. Milan: Elsevier; 2010.
[2] Ingegnoli F. Capillaroscopy abnormalities in relation to disease activity in juvenile systemic lupus erythematosus. Microvascular research. 2013;87:92–4.
[3] Dolezalova P, Young SP, Bacon PA, Southwood TR. Nailfold capillary microscopy in healthy children and in childhood rheumatic diseases: a prospective single blind observational study. Ann Rheum Dis. 2003;62(5):444–9.
[4] Shenavandeh S, Habibi S. Nailfold capillaroscopic changes in patients with systemic lupus erythematosus: correlations with disease activity, skin manifestation and nephritis. Lupus 2017:961203316686702.
[5] Terreri MT, Andrade LE, Puccinelli ML, Hilario MO, Goldenberg J. Nail fold capillaroscopy: normal findings in children and adolescents. Seminars in arthritis and rheumatism. 1999;29(1):36–42.
[6] Smith V, Beeckman S, Herrick AL, Decuman S, Deschepper E, De Keyser F, et al. An EULAR study group pilot study on reliability of simple capillaroscopic definitions to describe capillary morphology in rheumatic diseases. Rheumatology (Oxford). 2016;55(5):883–90.

Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.4704

AB0489 THE SLE-KEY® RULE-OUT TEST PERFORMS WELL AS AN AID IN CLINICAL PRACTICE

D. Massenburg, J. Oldenberg, A. Sell, T. Krause, A.F. Wells. *Rheumatology and Immunotherapy Center, Franklin, WI, United States*

Background: The SLE-key® test was developed by ImmunArray and was validated to rule out SLE with 94% sensitivity, 75% specificity and a negative predictive value (NPV) of 93%[1]. We reported earlier that the SLE-key® RuleOut test could aid in the diagnosis and disposition of a cohort of 55 patients in our clinical practice[2].
Objectives: We have now expanded this cohort and report here the usefulness of the SLE-key® test in aiding the management of a cohort of challenging and suspected SLE patients in a large clinical practice.
Methods: In patients referred to the Rheumatology and Immunotherapy Center, in Franklin, WI, results from the SLE-key® RuleOut test were included as part of the clinical evaluation. Serum samples were collected from individual subjects with informed consent and tested at VERACIS (Richmond, VA), using the SLE-Key® iCHIP®[1].
Results: We reviewed the diagnoses and clinical disposition of patients both before and after SLE-key® testing. In particular, we looked at the ability of the SLE-key® test to enhance our ability to reach a definitive diagnosis across the full cohort of patients, at the disposition of patients who were referred with a suspicion of SLE as part of the differential diagnosis, at the impact of SLE-key® testing on the diagnosis of the subset of patients who presented with minimal symptoms, and at the group of patients who had been referred following an ANA test. Results are summarized in Table 1. In the cases where SLE was ruled out, patients were treated for a variety of disorders including fibromyalgia, joint pain, MCTD, Sjogren's disease and others.

Table 1

Patient Subgroup	Status post SLE-key	Clinical Outcomes
Patients with uncertain diagnosis in our clinic prior to SLE-key® testing.	79% had an actionable diagnosis following SLE-key® test	57% were diagnosed to have SLE. 43% not SLE. Patients treated for a variety of disorders other than SLE
Patients referred to our clinic with SLE as part of differential diagnosis	62% confirmed SLE 32% Ruled Out	> 50% of those RuledOut were diagnosed with myalgia/ fibromyalgia and treated accordingly
Minimally symptomatic patients	65% Ruled Out for SLE	Patients treated for a variety of disorders other than SLE
Patients referred following ANA testing	44% Ruled Out for SLE	Patients treated for a variety of disorders other than SLE

Conclusions: The diagnosis of patients referred in the clinical rheumatology setting remains an ongoing challenge. The SLE-key® RuleOut test provides a laboratory aid to improve the diagnostic and dispositive efficiency saving undue concern, time and resources both to the patient and to the healthcare system. A retrospective analysis of our practices prior to the introduction of SLE-key® is warranted.

References:

[1] Putterman et al., Journal of Immunological Methods, 2016.
[2] Massenburg et al., Arthritis Rheumatol. 2016; 68 (suppl 10).

Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.5779

AB0490 ANALYSIS OF COMMON GRAM-NEGATIVE BACTERIA AND THEIR DRUG RESISTANCE IN HOSPITALIZED PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

D. Chen, Z. Zhan. *Rheumatology, The first affiliated hospital of SUN YAT-SEN UNIVERSITY, Guangzhou, China*

Background: Infection is an important cause of morbidity and mortality in patients with systemic lupus erythematosus (SLE). The spectrum of infectious agents in SLE patients varies significantly among different ethnic groups. The national surveillance study from the China showed that Gram-negative bacteria (GNB) was the most the common bacterial infection in China, while Gram-positive bacteria (GPB) was predominant in European countries.
Objectives: To identify the spectrum and drug resistant pattern of infection caused by GNB in patients hospitalized with SLE.
Methods: The clinical and microbiological data from hospitalized SLE patients with bacterial infection between June 2005 and June 2015 was collected and then analyzed retrospectively.
Results: Two hundred and sixty-eight episodes of bacteria had been identified from 3815 hospitalized patients. In terms of isolated microorganisms, gram-negative bacteria (GNB) were predominant over gram-positive bacteria (GPB) (178 isolates vs. 90 isolates). In the GNB, *Escherichia coli* (66/178, 37.1%) was the most common isolate, followed by *Acinetobacter baumannii* (36/178, 20.2%), *Klebsiella pneumoniae* (24/178, 13.5%), *Pseudomonas aeruginosa* (20/178, 11.2%), *Haemophilus influenzae* (10/178,5.6%), *Salmonella sp.* (7/178, 3.9%), *Enterobacter aerogenes* (5/178, 2.8%), *Stenotrophomonas maltophilia* (5/178, 2.8%), *Citrobacter freundii* (3/178,1.7%), *Proteus mirabilis* (2/178,1.1%). Resistant isolates (53/178, 30.0%) were more common documented in GNB, mostly extended-spectrum beta-lactamase (ESBL) producing *Escherichia coli* (30/66, 45.5%) and *Klebsiella pneumonia* (6/24, 25%), and multi-drug resistant *acinetobacter baumannii* (36.1%). Susceptibility tests showed that the ESBL-producing strains were highly sensitive to carbapenems, β-lactamase inhibitor compound families, and certain cefalosporin (Cefepime and Ceftazidime) *in vitro*. (the resistance rate <20%), whereas it was highly resistant to ampicillin and Gentamicin. Besides carbapenems and Cefoperazone/sulbactam, *Acinetobacter baumannii* was resistant to most antibiotics.
Conclusions: GNB was predominant in Chinese hospitalized patients with SLE. The drug resistance of GNB has increased significantly. It was necessary to rational use of antibiotics in patients with SLE.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.1951

AB0491 THE ASSOCIATION OF BASELINE HYPERURICEMIA IN PREMENOPAUSAL WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND DEVELOPMENT OF NEPHRITIS

D.H. Lim[1], S. Hong[2], J.S. Oh[3], Y.-G. Kim[2], C.-K. Lee[2], S.W. Choi[1], B. Yoo[2]. *[1]Division of rheumatology, Department of Internal Medicine, Ulsan university hospital, Ulsan; [2]Division of rheumatology, Department of Internal Medicine, Asan Medical Center; [3]Division of rheumatology, Department of Internal Medicine, National Medical Center, Seoul, Korea, Republic Of*

Background: Renal involvement is a common and serious manifestation of SLE. Hyperuricemia may be associated with lupus nephritis as a result of renal