

**Conclusions** Add-on treatment with BEL was effective to achieve low disease activity during PSL tapering which would lead to reducing GC related organ damages. However, recurrence was observed in both groups indicating the need for GC tapering strategies in an individual setting.

LP-063

### CLINICAL CHARACTERISTICS AND OUTCOMES OF LIBMAN SACKS ENDOCARDITIS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

<sup>1</sup>Eunsong Kang\*, <sup>2</sup>Joo Hyang Chun, <sup>1</sup>Soo Min Ahn, <sup>1,3</sup>Ji Seon Oh, <sup>1</sup>Yong Gil Kim, <sup>1</sup>Chang Keun Lee, <sup>1</sup>Bin Yoo, <sup>1</sup>Seokchan Hong. <sup>1</sup>Division of Rheumatology, Department of Internal Medicine, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Republic of Korea; <sup>2</sup>Department of Internal Medicine, Seoul Garden Hospital at Gangseo, Seoul, Republic of Korea; <sup>3</sup>Department of Information Medicine, Big Data Research Center, Asan Medical Center, Republic of Korea

10.1136/lupus-2023-KCR.172

**Background** Libman-Sacks (LS) endocarditis is one of the major cardiac involvement of systemic lupus erythematosus (SLE) and can manifest with neuropsychiatric events including stroke. However, data on the clinical features of LS endocarditis in comparison with infective endocarditis are limited. Thus, we compared SLE patients with LS endocarditis and those with infective endocarditis and analyzed the long-term clinical outcomes.

**Methods** We reviewed the medical records of SLE patients who were diagnosed with LS endocarditis or infective endocarditis between 1990 and 2021. Poor outcomes were defined as the occurrence of stroke, transient ischemic attack, or seizure during follow-up.

**Results** A total of 47 patients with LS endocarditis were compared with 5 patients with infective endocarditis. Patients with LS endocarditis were less likely to have fever, chest pain, and vegetation (40.4% vs. 100%,  $p=0.019$ ) and had smaller vegetation size (median, 0 mm, vs. 12 mm,  $p=0.008$ ) compared with those with infective endocarditis. Of the 37 patients with LS endocarditis who were followed for more than one year, 11 patients had poor outcomes, who had a significantly higher rate of vegetation (63.6% vs. 29.2%,  $p=0.048$ ) and a lower rate of pericardial effusion (27.3% vs. 66.7%,  $p=0.039$ ) than those without poor outcomes. The presence of vegetation and pericardial effusion were significantly associated with the development of poor outcomes.

**Conclusions** Patients with LS endocarditis had different clinical features compared with those with infective endocarditis. Neuropsychiatric outcomes occurred in approximately 30% of patients with LS endocarditis during follow-up, and the presence of vegetation and pericardial effusion were significant factors for the development of poor outcomes.

LP-064

### EFFECT OF OSTEOPOROSIS ON MAJOR ADVERSE CARDIOVASCULAR EVENTS (MACEs) IN SYSTEMIC LUPUS ERYTHEMATOSUS (SLE): A LONGITUDINAL STUDY

<sup>1</sup>Chi-Chiu Mok\*, <sup>1</sup>Kar Li Chan, <sup>1</sup>Ling Yin Ho, <sup>2</sup>Chi Hung To. <sup>1</sup>Medicine, Tuen Mun Hospital, Hong Kong; <sup>2</sup>Medicine, Pok Oi Hospital, Hong Kong

10.1136/lupus-2023-KCR.173

**Background** To study the effect of osteoporosis on MACEs in a longitudinal cohort of patients with SLE.

**Methods** Patients who fulfilled  $\geq 4$  ACR criteria for SLE and had a DEXA scan performed were followed longitudinally. The incidence of MACEs documented by imaging studies was evaluated. Osteoporosis/fracture at baseline was defined as a T score of  $< -2.5$  or Z score  $< -2.0$  at the hip/femoral neck/spine, or old fragility fractures. The effect of osteoporosis on incident MACEs was studied by Cox regression, adjusted for confounders.

**Results** 383 SLE patients were studied (age  $40.5 \pm 13$  years; 94% women). Osteoporosis/fractures was present in 113 patients at baseline. Over  $153 \pm 41$  months, 44 MACEs (acute coronary syndrome [ $n=19$ ]; ischemic stroke [ $n=19$ ]; peripheral vascular disease with digital gangrene [ $n=6$ ]) developed in 42 patients. The incidence of MACEs was significantly higher in patients with osteoporosis/fracture than those without (1.59 vs 0.63/100 patient-years;  $p=0.001$ ). The cumulative risk of MACEs by KM plot was significantly higher in the osteoporosis than non-osteoporosis groups ( $p=0.002$ ). Cox regression revealed osteoporosis/fracture was an independent risk factor for MACEs after adjustment for age, sex, vascular risk factors, past MACE, aPL antibodies, and the use of immunosuppressive drugs, aspirin/warfarin, statins, vitamin D and bisphosphonates (HR 2.41[1.25–4.67];  $p=0.009$ ). 62(16%) patients succumbed and osteoporosis/fracture at baseline was associated with vascular mortality (HR 11.1[1.02–120];  $p=0.048$ ) but not with all-cause mortality after adjustment for the same confounders.

**Conclusions** Osteoporosis increases the risk of MACEs and vascular mortality in patients with SLE, which is not accounted by traditional vascular risk factors.

LP-065

### PREVALENCE AND RISK FACTORS OF FRAGILITY FRACTURES IN SYSTEMIC LUPUS ERYTHEMATOSUS (SLE): A LONGITUDINAL STUDY OVER 12 YEARS

<sup>1</sup>Chi-Chiu Mok\*, <sup>1</sup>Kar Li Chan, <sup>1</sup>Ling Yin Ho, <sup>2</sup>Chi Hung To. <sup>1</sup>Medicine, Tuen Mun Hospital, Hong Kong; <sup>2</sup>Medicine, Pok Oi Hospital, Hong Kong

10.1136/lupus-2023-KCR.174

**Background** To study the prevalence and risk factors of fragility fractures in patients with SLE.

**Methods** 383 patients who fulfilled  $\geq 4$  ACR criteria for SLE and had a DEXA scan performed (baseline) were longitudinally followed for new fragility fractures. Osteoporosis/fracture was defined as a DEXA T score  $< -2.5$  or Z score  $< -2.0$  at the hip/femoral neck/spine or a history of old fractures. The cumulative incidence of new fractures was studied by Kaplan-Meier's analysis and risk factors by Cox regression, adjusted for confounders.

**Results** 383 SLE patients were studied (age  $40.5 \pm 13$  years; 94% women). Patients with osteoporosis/fracture at baseline ( $n=113$ ) were more likely to have childhood onset disease ( $< 18$  years), longer SLE duration and higher prevalence of hematological or neuropsychiatric manifestations than those without. Use of glucocorticoids (GCs) and MMF/AZA, BMI  $\leq 18$  kg/m<sup>2</sup>, premature menopause ( $< 45$  years) were also more frequent in the osteoporosis/fracture group. However, no difference in the SLEDAI scores was observed. Over  $153 \pm 41$  months, new symptomatic fragility fractures developed in 34(8.9%) patients (vertebral [ $n=19$ ], hip [ $n=2$ ], limbs (non-hip) [ $n=6$ ], digital/rib [ $n=7$ ]; incidence 0.69 per 100 patient-years). The cumulative risk of fragility fractures was