Conclusions Damage in SLE is significantly associated with relapse rate and high serum creatinine suggesting that controlling disease activity to prevent relapse and comorbidity is very important to prevent further damage. This study also reveals that cyclophosphamide administration was associated with increased risk of damage, probably related to the more active organ involvement (renal and cerebral) who received cyclophosphamide.

LP-175 FREQUENCIES, CLINICAL CHARACTERISTICS AND PROGNOSIS OF PATIENTS WITH NEUROPSYCHIATRIC SYSTEMIC LUPUS ERYTHEMATOSUS

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Background Neuropsychiatric systemic lupus erythematosus (NPSLE) comprises of various neurological and psychiatric conditions in patients with SLE. The frequencies, clinical manifestations and prognosis may vary significantly among different disease entities.

Methods Clinical records of 431 Chinese SLE patients were reviewed. Manifestations of NPSLE were defined based on the 1999 American College of Rheumatology (ACR) nomenclature.[1] 'Common' neuropsychiatric events (anxiety, headache, mild depression, mild cognitive dysfunction, and polyneuropathy without electrophysiological confirmation) described by the Ainiala's criteria were excluded.[2] Other neuropsychiatric evens in the absence of alternative contributing factors were attributed to SLE. The frequencies of different NPSLE manifestations were reported. Clinical features of patients with central nervous system (CNS) diseases and peripheral nervous system (PNS) diseases were described and compared.

Results Among 431 Chinese SLE patients, 396 (91.9%) were female and the median age of SLE onset was 26 (IQR 15) years. NPSLE occurred in 88 (20.4%) patients, including 77 and 11 patients with CNS and PNS diseases, respectively. The most frequent manifestations were mood disorder (26/431; 6.0%), seizure disorder (15/431; 3.5%), acute confusion (11/431; 2.6%), mononeuritis (7/431; 1.6%), and myelopathy (6/431; 1.4%). The median time from SLE diagnosis to onset of NPSLE was 6 (IQR 16) years and 10 (IQR 7.5) years for CNS and PNS diseases, respectively. Compared to CNS diseases, patients with PNS diseases had older age at SLE diagnosis (PNS 39 years vs CNS 25 years, p=0.04) and older age at NPSLE onset (PNS 47 years vs CNS 34 years, p=0.02). The 10-year survival rates were 96.1% and 100% for CNS and PNS diseases, respectively.

Conclusions PNS diseases are important manifestations in patients with long-standing SLE, especially in patients with older age at SLE diagnosis. The outcome is favorable compared with patients with CNS diseases. Prospective studies are needed to confirm these findings.

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LP-176 SARS-COV-2 ANTIBODY FORMATION AFTER COVID-19 VACCINATION IN SLE PATIENTS TREATED WITH BELIMUMAB: SINGLE-CENTER PROSPECTIVE OBSERVATIONAL STUDY

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Background Patients with systemic lupus erythematosus (SLE) should be more proactive with the administration of the COVID-19 vaccine, as their systemic conditions are prone to developing severe outcomes. However, there are concerns that immunosuppressive agents used in SLE patients could reduce the immune response. Previous data demonstrates that total B-cell depletion impairs the humoral response in patients treated with Rituximab, but there is very limited information about Belimumab. Thus, we aimed to assess the immunogenicity and safety of COVID-19 vaccine in SLE patients treated with Belimumab.

Methods Patients with SLE receiving B-cell targeted therapy with Belimumab were recruited from December 14, 2021, to June 17, 2022. We reviewed the patients' immunization history and measured the antibody titers of patients who had completed their third dose of COVID-19 vaccine. SARS-CoV-2 antibody titers were determined through semiquantitative anti-SARS-CoV-2 S enzyme immunoassay.

Results A total of 21 patients with SLE receiving Belimumab treatment were surveyed, out of which 10 patients had completed 3 doses of COVID-19 vaccinations. The mean duration between the last (3rd) vaccination date and the date of sample acquisition was 22.5 weeks, and there was no patient with side effects other than mild myalgia. The antibody titers were positive in all 10 patients, with 8 patients showing high antibody titers of 250 U/mL or more. The other 2 patients measured relatively low antibody titers of 117 U/mL and 112 U/mL, with a treatment history with Rituximab within one year and current treatment with hydroxychloroquine, respectively.

Conclusions Our findings suggest that Belimumab does not compromise the antibody production from the vaccination. SLE patients with Belimumab need not be reluctant to get COVID-19 vaccines in regard to humoral response impairment.

LP-211 DISEASE MANIFESTATIONS AND OUTCOMES IN JUVENILE AND ADULT ONSET SLE – A NESTED CASE CONTROL STUDY WITHIN A SINGAPORE COHORT

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Background To compare disease manifestations and outcomes of juvenile-onset SLE (jSLE) and adult-onset SLE (aSLE) patients using a nested case control study of patients in a Singapore cohort.

Methods A prospective cohort of SLE patients was established at Tan Tock Seng Hospital from 1st January 2002 to 31st December 2017. Sociodemographic, clinical, laboratory and

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