syndrome and generally require a more aggressive treatment than for adult population.

We present a series of two cases of pediatric systemic lupus erythematosus.

First case is of a girl 17 years old who presented with malar rash and discoid lesions on photo-exposed area with histopathological picture relevant for chronic discoid lupus erythematosus. The immunological screening revealed positive antinuclear antibodies, positive anti DNAc antibodies and decreased complement (C3 and C4). The investigations also showed lymphocytopenia but no other organ involvement (no proteinuria and no echographic cardiac changes). She also complained about different skin rashes, non-specific for lupus, which were resolved only by oral corticosteroids administration. Currently she is on hydroxychloroquine with a favorable course but we close monitoring her by rheumderma team.

The second case is also a girl 13 years old who is known with a single discoid lesion on the right cheek for about 3 years treated with dermato-corticosteroids and lasers with no improvement. Furthermore, she developed atrophic arena on the same spot and another round lesions on the malar area and on the scalp. She also had photosensitivity together with positive antinuclear antibodies and anti DNAc antibodies. We performed a biopsy relevant for discoid lupus and begun hydroxychloroquine treatment (200 mg/day).

Despite the treatment the lesions did not show significative improvement. We added mycophenolate mofetil and local calcineurin inhibitor with a good cutaneous and immunological response.

Conclusions The two cases presented prove that childhood-onset systemic lupus erythematosus need an intense multidisciplinary approach because of its aggressive course and disease flares associated with higher morbidity.

LP-033 A STUDY OF TREATMENT SATISFACTION IN THE PATIENTS WITH RHEUMATOID ARTHRITIS AND SYSTEMIC LUPUS ERYTHEMATOUS

Hyo-Jin Choi*, Mi Ryoung Seo, Han Joo Baek. Department of Internal Medicine, Division of Rheumatology, Gachon University Gil Medical Center, Republic of Korea

Background To evaluate treatment satisfaction in the patients with chronic rheumatic diseases.

Methods This cross-sectional study was performed from September 2021 through December 2021 using treatment satisfaction questionnaire for medication (TSQM).

Results Two hundred fifteen patients (RA patients n=114, SLE patients n=101) were enrolled in this study. 82.3% were female (73.7% of RA, 92.1% of SLE, p < 0.001). The mean of age was 52.8 years (57.8 years vs. 47.2 years, p < 0.001), of disease duration was 9.1 years (6.8 years vs. 11.8 years, p < 0.001), of duration of education was 11.5 years (11.0 years vs. 12.0, p=0.010). Mean of DAS28-ESR was 2.0, of DAS28-CRP was 1.8, of SLEDAI was 1.8, and of EQ5D-VAS was 68.8. Mean of TSQM summary scores; 1) treatment effectiveness was 64.5 (66.5 vs. 62.3, p=0.028), side effects was 97.6 (97.9 vs. 97.3, p=0.726), convenience of administration was 67.7 (66.9 vs. 68.7, p=0.268), and global satisfaction was 65.2 (66.2 vs. 63.9, p=0.307). There were good correlations between TSQM and demographic data in age at symptom onset, duration of education, global assessment of patient or physician, ESR, CRP, DAS28-ESR/CRP, and SLEDAI. The score 80 or more of global satisfaction was defined as ‘satisfied’, 80 or more group (n=36, 16.7%) showed longer duration of education, higher income, lower global assessment of patients or physician, and higher EQ5D-VAS (all, p < 0.05) compared to 80 or less group. However, SLE patients with 80 or more score showed just a trend in the household income per month (p=0.054). Among EQ-5D questionnaires, the level of pain/discomfort and anxiety/depression were significantly difference between 80 or more and less group.

Conclusions Factors associated with global satisfaction ‘satisfied’ were duration of education, household income per month, pain/discomfort, or anxiety/depression in this study. Although most of them were stable disease status, patients with SLE showed lower treatment satisfaction than RA patients.

LP-038 INFECTION IN SYSTEMIC LUPUS ERYTHEMATOSUS ASSOCIATED DIFFUSE ALVEOLAR HEMORRHAGE: A POTENTIAL KEY TO IMPROVE OUTCOMES

1Mucoung Li*, 1Wei Bai, 1Yanhong Wang, 1Lan Song, 1Shangzhu Zhang, 1Juliang Zhao, 1Chanyuan Wu, 1Mengtao Li, 1Xinpeng Tian, 1Xiaofeng Zeng. 1Department of Rheumatology, Peking Union Medical College Hospital, China; 2Department of Epidemiology and Biostatistics, Peking Union Medical College, China; 3Department of Radiology, Peking Union Medical College Hospital, China

Background This study aimed to investigate the clinical characteristics, outcomes, and risk factors of patients with a rare but fatal manifestation of systemic lupus erythematosus (SLE), diffuse alveolar hemorrhage (DAH), stratified by infection status in a national representative cohort.

Methods This single-center retrospective study included 124 consecutive patients with SLE-DAH in a tertiary care center between 2006 to 2021. The diagnosis of DAH was made based on a comprehensive evaluation of clinical manifestations, laboratory and radiologic findings, and bronchoalveolar lavage. Demographics, clinical features, and survival curves were compared between patients with bacterial, non-bacterial, and non-infection groups. Univariate and multivariate logistic regression analysis were performed to determine the factors independently associated with bacterial infection in SLE-DAH.

Results Fifty-eight patients with SLE-DAH developed bacterial infection after DAH occurrence, thirty-two patients developed fungal and/or viral infection, and thirty-four patients were categorized as non-infection. The bacterial infection group have a worse prognosis (OR 3.059, 95%CI 1.469–6.369, p=0.002) compared with the other two groups, with a mortality rate of 60.3% within 180 days after DAH occurrence. Factors independently associated with bacterial infections in SLE-DAH included hematuria (OR 4.523, 95%CI 1.469–6.369, p=0.040), hemoglobin drop in the first 24 hours after DAH occurred (OR 1.056, 95%CI 1.001–1.115, p=0.049), and anti-Smith antibody (OR 0.167, 95%CI 0.052–0.535, p=0.003). Glucocorticoid pulse therapy and cyclophosphamide were administered in more than 50% of patients regardless of their infectious status. According to clinical experience at our hospital and in previous studies, we recommended a comprehensive management algorithm for SLE-DAH based on infection stratification.
Conclusions Infection, especially bacterial infection, is a severe complication and prognostic factor of SLE-DAH. Comprehensive management strategies, including diagnosis, evaluation, treatment, and monitoring, based on infection stratification may fundamentally improve outcomes of patients with SLE-DAH.

Comprehensive management algorithm for SLE-DAH. SLE, systemic lupus erythematosus; DAH, diffuse alveolar hemorrhage; Hgb, hemoglobin; BALF, bronchoalveolar lavage fluid; Anti-Sm: anti-Smith antibodies; CTX, cyclophosphamide.

Background Juvenile systemic lupus erythematosus (jSLE) has more severe and aggressive clinical features than adult onset SLE. We investigated the risk factors related with long-term outcome among initial parameters at diagnosis.

Methods The study was designed for patients initially diagnosed with jSLE below 18 years old between January 2009 and December 2021. We excluded patients with previous diagnosis, transferred from another hospitals, clinical findings related with infection or post-transplantation, and underlying diseases. We reviewed retrospectively electronic medical records for initial laboratory data, and clinical manifestations including SLE disease activity index-2K (SLDAI-2k). We analyzed parameters associated with survival and events including flare, complications, and new organ involvement.

Results Total 109 patients were enrolled in this study. The mean age was 14.4 ± 2.3 years old, and the female to male ratio 7.4:1. Twenty-eight patients (25.7%) were diagnosed at pre-pubertal period. The overall survival rate was 92.9% (median: 5 years, range: 0 ~ 13 years). The causes of death were intractable macrophage activation syndrome, disease related state, and sepsis. The related factors for survival were initial C-reactive protein (CRP, P =0.017, HR: 2.396, 95% CI: 1.165 ~4.926) in multi-variate analysis, although there were associated with CRP, SLEDAl, and false positivity for syphilis (P < 0.05) in univariate analysis. The event free survival was 10.4% and related with SLEDAl, anti-smith antibody, false positivity for syphilis, and ANCA (P<0.05) in univariate analysis. In multivariate analysis, factors associated with event were SLEDAl-2K (P=0.035, HR: 2.82, 95% CI: 1.078 ~7.375), anti-Smith antibody (P=0.019, HR: 3.262, 95% CI: 1.218 ~ 8.741).

Conclusions These results suggested that initial SLEDAl and markers for immune response were related with survival and events during follow-up. We have to concern disease activity and laboratory parameters for long-term outcome in jSLE.

A comparative study on the effect of high-dose dexamethasone pulse therapy versus methylprednisolone pulse therapy in systemic lupus erythematosus patients admitted at Bicol Medical Center

Aileen Billones*, Richard John Pelo. Internal Medicine, Bicol Medical Center, Philippines

Background The efficacy of methylprednisolone pulse therapy is well-established however, the gold standard of treatment is quite expensive and associated with significant infectious complications. Currently, there are no published study comparing the effect of methylprednisolone pulse therapy versus dexamethasone pulse therapy. Hence, this research aims to compare the current standard of care (methylprednisolone) versus the alternative regimen (dexamethasone pulse therapy).

Methods The study employed descriptive cross-sectional study. The participants included are patients with Systemic Lupus Erythematosus (SLE) treated with either high-dose dexamethasone or methylprednisolone pulse therapy. Data were collected via retrospective review of medical charts.

Results A total of 45 patients were included in the study, 98% of which are female and 62% were treated with dexamethasone. The most common presenting features of SLE were hematologic (87%) and nephritis (44%). There is no significant difference in any of the characteristics, presenting features and outcomes between dexamethasone and methylprednisolone-treated patients (all p’s>0.05) except for neurologic manifestations. The most common indication for methylprednisolone pulse and dexamethasone pulse therapy for all patients in the study is nephritis (38%). In our study, neuropsychiatric lupus is the most common indication for methylprednisolone pulsing-treated patients (53%) whereas, nephritis and anemia are the common indications for dexamethasone pulse therapy.

Conclusions The characteristics of patients treated with dexamethasone and methylprednisolone were similar except for neurologic manifestations. In addition, the clinical outcomes of dexamethasone patients were comparable to methylprednisolone. Dexamethasone is less expensive than methylprednisolone which is a good alternative option for patients that belongs to low-income group; however, Randomized Controlled Trials should be performed to provide higher level of evidence in terms of efficacy and safety.

Bilateral pallidal lesions in a patient with neuropsychiatric lupus patient: A Case Report

Yan-Siang Huang, Chien-Sheng Wu. Department of Neurology, Far Eastern Memorial Hospital, Taiwan; Department of Internal Medicine, Far Eastern Memorial Hospital, Taiwan

Description Manifestations of neuropsychiatric lupus are highly variable. Neuroimaging such as magnetic resonance imaging (MRI) has been used extensively for evaluating neuropsychiatric lupus. Here we reported a patient with neuropsychiatric lupus who presented with decline in memory and neuropsychiatric syndrome. SLE-Lupus erythematosus; MRI- Magnetic Resonance Imaging; ANA- anti-nuclear antibodies; NS- Nonspecific; MRI- magnetic resonance imaging; CSF- cerebrospinal fluid; NLR- neutrophil to lymphocyte ratio; SLEDAI- Systemic Lupus Erythematosus Disease Activity Index-2K; DSM- Diagnostic and Statistical Manual of Mental Disorders; TBI- Traumatic Brain Injury; TIA- Transient Ischemic Attack; MRA- Magnetic Resonance Angiography; AD- Alzheimer’s Disease; TLE- Temporal Lobe Epilepsy; MCI- Mild Cognitive Impairment; SD- Standard Deviation; SDMT- Symbol Digit Modalities Test; SQRT- Square Root; SDMT- Symbol Digit Modalities Test; TPMT- Trail Making Test Part A; FPMT- Trail Making Test Part B; TMT- Trail Making Test. Neuroimaging revealed moderate atrophy in the bilateral basal ganglia. The patient was diagnosed with bilateral pallidal lesions in a patient with neuropsychiatric lupus patient. She was treated with 60 mg prednisone for 1 year and 30 mg prednisone for 1 year. The patient showed improvement on her neuropsychiatric symptoms. She was discharged with prednisone 15 mg and was scheduled for follow-up at 6 months.