INTRODUCTION: There is a paucity of clinical studies on children with neuropsychiatric systemic lupus erythematosus (NPSLE).

OBJECTIVE: The objective of this study was to define the clinical characteristics of and the potential predictors for NPSLE in Chinese children.

METHODS: Sixty-two children with SLE diagnosed between 1990 and 2006 were retrospectively reviewed. Patients were evaluated according to the American College of Rheumatology case definitions (1999) for classification of neuropsychiatric symptoms. The demographic data, clinical manifestations, laboratory parameters (complete blood count, erythrocyte sedimentation rate, C-reactive protein, complement levels, anti-cardiolipin antibodies, and autoimmune markers), treatment, and SLE disease activity index score were analyzed.

RESULTS: Nineteen (30.65%) patients with SLE and 21 neuropsychiatric events were identified. Mean age at NPSLE manifestations was 13.57 ± 4.33 years. The most common neuropsychiatric manifestations were cognitive dysfunction (47.62%), seizure disorder (42.86%), and headache (28.57%), followed by mood disorder (19.05%), myelopathy (19.05%), cerebrovascular disease (14.29%), psychosis (9.52%), cranial neuropathy (9.52%), and mononeuropathy multiplex (4.76%). Renal involvement at diagnosis of SLE was significantly less common in patients with NPSLE than in those with non-NPSLE. Apart from that, we could not identify other clinical or laboratory parameters that could predict the development of NPSLE. Six patients presented with neuropsychiatric symptoms at onset of SLE. Comparing them with patients with later neuropsychiatric development, their mean age was younger and the SLE disease activity index score was significantly higher.

CONCLUSIONS: Neuropsychiatric symptoms were common in Chinese children with SLE. Early-onset NPSLE occurred in younger patients with higher disease activity score. Neuropsychiatric development was negatively associated with renal involvement at diagnosis.

INTRODUCTION: Infection is a significant cause of morbidity and mortality in patients with systemic lupus erythematosus (SLE). We postulated that patients with recurrent infections are more likely to have poorer disease outcome.

OBJECTIVE: The objectives of this study were to describe the pattern of infections and disease damage that occurred in a cohort of patients with juvenile-onset SLE and to determine whether cumulative disease damage was associated with recurrent infections in these patients.

METHODS: We retrospectively reviewed (1988–2004) the clinical characteristics, infective complications, and disease damage as measured by the Systemic Lupus International Collaborating Clinics/American College of Rheumatology Damage Index Score (SDI) in 47 patients with juvenile-onset SLE. Potential risk factors for disease damage were evaluated by univariate analysis and logistic regression. The correlation between number of major infections and disease damage was determined.

RESULTS: Thirty-two (68.1%) patients had lupus nephropathy, and 16 (34.0%) patients had neuropsychiatric lupus. Sixty-one episodes of major infections, defined as infections that required more than 1 week of antimicrobial agents, occurred in 27 (57.4%) patients, and 18 (31.4%) patients had recurrent major infections (≥2 episodes). Organ damage (SDI ≥ 1) was documented in 21 (44.7%) patients. By logistic regression, occurrence of major infections was the only significant risk factor for disease damage. There was a positive correlation between SDI score and the number of recurrent major infections.

CONCLUSIONS: Infections and disease damage are common comorbidities in juvenile-onset SLE. Recurrent infections could predict poorer disease outcome and associated organ damage in SLE.
RECURRENT MAJOR INFECTIONS IN JUVENILE-ONSET SYSTEMIC LUPUS ERYTHEMATOSUS: A CLOSE LINK WITH LONG-TERM DISEASE DAMAGE

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