Factors That Influence Therapy in Patients with Undifferentiated Connective Tissue Disease

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Background Preclinical autoimmunity may offer a unique opportunity for preventing the development of SLE. This study was initiated to compare clinical and immunological characteristics in patients with undifferentiated connective tissue disease (UCTD) treated with hydroxychloroquine (HCQ) in a large academic clinical practice.

Materials and methods This cross-sectional study included all patients diagnosed with UCTD according to the preliminary classification criteria (1) seen at the Columbia University Lupus Centre in New York, from January to December 2015. Clinical and immunological variables were ascertained. Chi squared tests were used to compare the following characteristic between treated and untreated patients: demographic characteristics, number of ACR criteria, SLICC criteria, individual symptoms and laboratory values.

Results Eighty-three patients were identified; 93% were female, mean age at diagnosis of 44 years ± 14.9; 67% were Caucasian, 20% Hispanic and 11% Black/African American; median disease duration of 3.91 years ± 5.35. The most prevalent symptoms that required medical attention are described in Figure 1. 95% of patients had positive antinuclear antibody (ANA) titers and 5% were ANA negative Ro+, 87% had titers between 1:80 and 1:640, with speckled pattern in 69% of patients. Interestingly, 16% of the patients met SLICC SLE criteria. Half of the patients, 42 (51%) were treated with HCQ and 41 (49.3%) were not treated. The patients treated with HCQ were more likely to also meet SLICC criteria (10 vs. 3, respectively; p = 0.03), have a history of arthralgia (38 vs. 29; p = 0.02), arthritis (28 vs. 10; p = 0.0001), and fatigue (25 vs. 14; p = 0.02). A history of low complement was more prevalent in the treated group (12 vs. 3, p = 0.01).

Conclusions Data from this single-centre cohort of patients with UCTD show that patients treated with HCQ by their rheumatologist are more likely to have multiple clinical criteria and low complement compared to those that were not treated. These data suggest that rheumatologist treat pre-clinical autoimmunity in the setting of clinical symptoms. None of patients were treated based on serologies alone. Longitudinal studies are needed to evaluate the long-term impact of HCQ on outcomes in patients with UCTD.

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A Pilot Study of Consensus Treatment Plans for Induction Therapy in Childhood Proliferative Lupus Nephritis

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Background Childhood-onset systemic lupus erythematosus (cSLE) patients are at higher risk for renal disease than those with adult-onset disease. Mycophenolate mofetil (MMF) and intravenous cyclophosphamide (IV CTX), commonly used for induction therapy of proliferative lupus nephritis (LN), are considered equally efficacious in adults. Comparative data in the paediatric population are lacking. To reduce treatment variability and facilitate comparative effectiveness studies, the Childhood Arthritis and Rheumatology Research Alliance (CARRA) published a consensus treatment plan (CTP) for induction therapy in childhood proliferative LN. The CTP recommended treatment with MMF or IV CTX and one of three steroid regimens: primarily oral, primarily IV, or mixed oral/IV. We report physician decision-making and 6-month response rates in a multi-centre pilot feasibility study.

Materials and methods This observational study enrolled 41 cSLE patients from 10 CARRA sites. Subjects had new-onset biopsy proven class III or IV proliferative LN and were starting MMF or IV CTX. Complete renal response (CRR), defined as normal renal function, inactive urine sediment, and spot urine protein/creatinine ratio of <0.2, was measured at 6 months. Subjects were followed for up to 24 months. Baseline demographics, disease-related features, physician decision-making and achievement of CRR were compared according to induction treatment group and among steroid regimens.

Results The majority of participants were female (83%) with a mean age of 14 years. There were no significant differences in demographics between MMF or IV CTX groups or among...