

AB0584

PAEDIATRIC VS ADULT ONSET SYSTEMIC LUPUS ERYTHEMATOSUS: THE SIMILARITIES AND DIFFERENCES; A STUDY FROM A TERTIARY CARE CENTRE FROM NORTHERN INDIA *;+

J. Patel¹, M. Agarwal², A. Shivpuri², G.S. Bhandari¹, N. Jain³, S. Sawhney², L. Duggal². ¹Rheumatology; ²Pediatric Rheumatology; ³Sir Gangaram Hospital, New Delhi, India

Background: Systemic lupus erythematosus (SLE) is a chronic autoimmune disease with myriad of systemic features. While the disease manifestations and therapy remain same for both paediatric onset(cSLE) and adult onset SLE (aSLE), disease manifestation and burden of disease differs in the two populations.

Objectives: To study disease profile within 6 months of disease onset and burden of disease by SLEDAI of aSLE and cSLE to understand the similarities and differences and to compare with those from around the world

Methods: Retrospective review done of 100 aSLE and cSLE patients, from June 2015 to June 2016, fulfilling SLICC criteria. Demographic data, clinical profile and ds burden at onset(highest of 1st 6 mths of ds onset) by SLEDAI 2K were recorded on a predesigned proforma

Results: The incidence of skin involvement (acute and chronic cutaneous lupus, alopecia) serositis more in aSLE. Oral mucositis, neuropsychiatric SLE(NPSLE) and lupus nephritis(LN) more common in cSLE. LN was also higher in cSLE from other centres around the world as compared to aSLE. Of statistical significance were non SLICC features like fatigue, Raynaud phenomenon and fatigue in aSLE. cSLE significantly differed in higher incidence of non SLICC features like fever, vasculitic rash and in laboratory features like leucopenia, low complements, dsDNA positivity and antiphospholipid antibody(APLA) positivity. Although APLA antibodies were frequent in cSLE, thrombotic events were rare. On the other hand, thrombotic events were significantly associated with aSLE. Median SLEDAI at onset was higher in cSLE than aSLE. The higher incidence of LN in CSLE than aSLE was similar from the inception cohort from Toronto.¹The mean SLEDAI at onset was also similarly higher in cSLE. The Spanish SLE registry also reported similar findings.²

Abstract AB0584 – Table 1

| Data at onset | aSLE(n=100) | cSLE(n=100) | p value | SLICC FEATURES | aSLE(%) | cSLE(%) | p value |
|----------------------------------|-------------|--------------------|----------|---------------------------------------|---------|---------|----------|
| Male/ Female | 15/85 | 24/76 | 0.15 | Acute cutaneous lupus | 67 | 55 | 0.11 |
| Median Age at onset | 34 (9 - 71) | 9.5 (3.4 - 17.4) | - | Chronic cutaneous lupus | 07 | 05 | 0.77 |
| Median Age at diagnosis(years) | 35 (9 - 71) | 10.25 (3.5 - 19.0) | - | Mouth ulcer | 46 | 55 | 0.26 |
| Median delay to diagnosis(years) | 1 (0 - 15) | 0.75 (0 - 5.33) | - | Alopecia | 63 | 57 | 0.47 |
| Fever | 57 | 82 | 0.0002 * | Arthritis | 47 | 65 | 0.015 * |
| Fatigue | 88 | 57 | 0.0001 * | Serositis | 23 | 13 | 0.097 |
| Weight loss | 47 | 33 | 0.06 | Pleural effusion/pericardial effusion | 20 | 11 | 0.12 |
| RP | 39 | 09 | 0.0001 * | Lupus nephritis | 26 | 36 | 0.17 |
| Myalgia | 42 | 52 | 0.20 | NPSLE | 13 | 24 | 0.068 |
| Vasculitic rash | 04 | 29 | 0.0001 * | Leukopenia | 07 | 25 | 0.0008 * |
| lymphadenopathy | 27 | 48 | 0.0034 * | Thrombocytopenia | 32 | 21 | 0.11 |
| SLEDAI (mean) | 12.9 | 16.59 | - | ANA positivity | 100 | 99 | 1.0 |
| Thrombosis | 18 | 01 | 0.0001 * | Anti-dsDNA positivity by IF | 47 | 77 | 0.0001 * |
| | | | | Anti-SM | 24 | 13 | 0.068 |
| | | | | Anti-cardiolipin antibody | 09 | 21 | 0.028* |
| | | | | LAC | 09 | 22 | 0.018* |
| | | | | Low complements | 41 | 82 | 0.0001 * |
| | | | | DAT positivity | 31 | 33 | 0.88 |

Conclusions: This study showed significant difference in initial systemic involvement and onset of presentation in aSLE and cSLE. cSLE present with more subtle features and seldom have a classic presentation with malar rash, oral mucositis and alopecia which oft herald aSLE. cSLE and aSLE though being the same disease often have a varied spectrum of presentation and the generalist and the treating teams need to be aware of these for prompt recognition of the disease and optimum therapy

REFERENCES:

- [1] Brunner HI, Ibañez D, Urowitz MD, Silverman ED. Difference in Disease Features Between Childhood-Onset and Adult-Onset Systemic Lupus Erythematosus. *Arthritis and rheumatism*. 2008;58(2):556–62.
- [2] Torrente-Segarra V SMT, Rúa-Figueroa I, Alonso F, López-Longo FJ, Galindo-Izquierdo M, et al. on behalf of the RELESSER Study Group of the Spanish Society of Rheumatology (SER) and the Study Group of

Systemic Autoimmune Diseases of the SER (EAS-SER). Juvenile- and adult-onset systemic lupus erythematosus: a comparative study in a large cohort from the Spanish Society of Rheumatology Lupus Registry (RELESSER). *Clinical and Experimental Rheumatology* 2017; 35: 1047–1055

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.5591

AB0585

A LUPUS LOW DISEASE ACTIVITY STATE IS ASSOCIATED WITH REDUCED FLARE, LOWER ORGAN DAMAGE ACCRUAL, AND BETTER QUALITY OF LIFE IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

J.-H. Kang, K.-E. Lee, D.-J. Park, S.-S. Lee. *Chonnam National University Medical School and Hospital, Gwangju, Korea, Republic of Ireland*

Objectives: To identify the potential predictors of a lupus low disease activity state (LLDAS), and the relationship between LLDAS and disease flare, organ damage, and quality of life in Korean patients with systemic lupus erythematosus (SLE).

Methods: The study followed 181 SLE patients from a single centre for three years. LLDAS was defined as follows:¹ SLE Disease Activity Index (SLEDAI)–2K≤4, with no activity in major organ systems;² no new lupus disease activity compared with the previous assessment;³ SLEDAI Physician Global Assessment≤1;⁴ a current prednisolone (or equivalent) dose ≤7.5 mg daily; and⁵ well-tolerated standard maintenance doses of immunosuppressive drugs. We assessed data annually and divided 4 groups according to the number of LLDAS; LLDAS=0, 1, 2, and 3. Univariate and multivariate analyses were performed to identify predictors of LLDAS.

Results: Of the 181 patients, 16.0% attained LLDAS on three consecutive years. Each group shows as follows; no LLDAS (n=30), LLDAS=1 (n=60), LLDAS=2 (n=62), and LLDAS=3 (n=29). The patients who had higher number of LLDAS had shorter duration of symptoms, lower anti-histone antibody positivity, lower cumulative prescribed dose of prednisolone at baseline, lower mean PGA, lower mean SLEDAI, lower mean Mental Component Summary in SF-36, lower change in SLICC/ACR damage index, and a lower frequency of flare. In the multivariate analysis, LLDAS was significantly associated with lower mean PGA (OR=0.671, 95% CI: 0.112–0.989, p=0.019) and a reduced risk of flare after adjusting for confounders (OR=0.012, 95% CI: 0.001–0.448, p=0.017).

Conclusions: Attaining LLDAS was associated with an improved outcome, as represented by a decreased rate of disease flare, lower organ damage accrual, and better quality of life in Korean patients with SLE.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.2739

AB0586

CURRENT IMPACT OF ETHNICITY ON RENAL HISTOLOGY AND OUTCOME OF LUPUS NEPHRITIS

J. Nossent^{1,2}, W. Raymond², A. Kang³, D. Wong³, M. Ognjević², A. Chakera^{4,5}. ¹Rheumatology, Sir Charles Gairdner Hospital, Nedlands; ²Rheumatology, School of Medicine, University of Western Australia, Crawley; ³Pathology, PathWest Laboratory Medicine, Nedlands; ⁴School of Medicine, University of Western Australia, Crawley; ⁵Nephrology, Sir Charles Gairdner Hospital, Nedlands, Australia

Background: Lupus Nephritis (LN) remains a serious complication of Systemic Lupus Erythematosus (SLE) and continuous worldwide demographic changes as well as new mechanistic insights and treatment options necessitate regular updating of our knowledge of LN.

Objectives: To investigate the current relevance of demographic, clinical and histological characteristics as outcome predictors in patients with Lupus Nephritis.

Methods: A retrospective single centre cohort study of all SLE patients undergoing a first renal biopsy for LN evaluation between 1997–2017 in a metropolitan hospital in Western Australia with a 750,000 catchment area. Demographic, laboratory and treatment data were collected at baseline and at last follow-up using a predefined form and histological findings (ISN class) were re-evaluated. Kaplan Meier survival estimates for patient and renal survival were tested by log-rank test.

Results: The final study cohort included 90 SLE patients (age 31.5 years, 88% female, time since SLE diagnosis 0.3 years.) of Caucasian (n=42), Asian (n=30), Aboriginal (n=11) and other ethnicity (n=7, mainly SubSaharan Africans). The annual LN incidence estimate was 0.6/100,000. There were no significant differences across subgroups regarding renal (overall median 14) and nonrenal SLEDAI (median 4) scores, proteinuria (median PCR 300 mg/mmol), presentation with raised serum creatinine (31% overall), anti-dsDNA Ab (89%) or hypocomplementemia (88%) or presence of proliferative (Class III/IV: 66%) or membranous (Class V:19%) LN. Corticosteroid (86%), immunosuppressive (87% overall) and