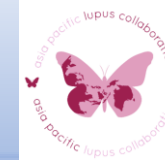


Systemic Lupus Erythematosus (SLE) Waitemata patients in Auckland: Epidemiology and Attainment of Lupus Low Disease Activity State (LLDAS)

Dr Nisha Prashar, Rheumatology Advanced Trainee Registrar Counties Manukau, Auckland
 Ms Sue Austin, Research Nurse and Trial Coordinator Waitemata, Auckland
 Dr Kristine (Pek Ling) Ng, Rheumatologist Waitemata, Auckland

Asia Pacific Lupus Collaboration



Working together to improve lupus patient outcomes

Te Whatu Ora
Health New Zealand

Background

- Lack of SLE research in New Zealand
- The Asia Pacific Lupus Collaboration (APLC) is an international registry of 4106 lupus patients involving 13 countries in the Asia-Pacific region
- Te Whatu Ora Waitemata is the lead site in NZ recruiting patients in the APLC prospective treat-to-target (T2T) Lupus Low Disease Activity State (LLDAS) study since 2018
- LLDAS is a composite measure of lupus disease activity and achieving this state is associated with better clinical outcomes

Aim

- To assess SLE epidemiology, clinical characteristics, LLDAS attainment, lupus damage index, quality of life scores in Waitemata APLC cohort
- To examine if there are ethnic differences in the ability to achieve LLDAS

Methods

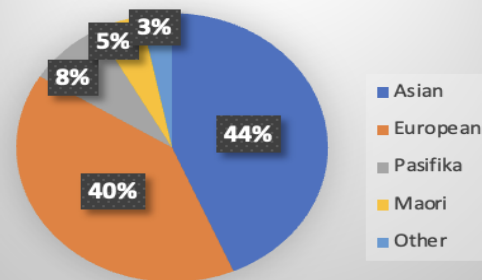
- Patients were recruited from Waitemata Rheumatology clinics from 2018-2020.
- All patients >18y fulfilled either the ACR* or SLICC** lupus criteria.
- Study visits were 3-6 monthly.
- Demographics, clinical manifestations, medication and laboratory data were collected at each visit.
- Disease activity and flares were assessed using SLEDAI-2K.
- Damage accrual (SLICC-DI) and quality of life (SF-36) information were obtained annually.

Results

- Total number of patients = 62
- Incidence of SLE in WDHB 5.72/100,00 (95% CI 5.09-6.41)
- Average number of visits was 4
- All patients in cohort were ANA positive
- Quality of life data: 18/25 completed SF-36 questionnaire:
- Mean physical component score 47 (<50; poor physical health)
- Mean mental component score 52 (<42; poor mental health)

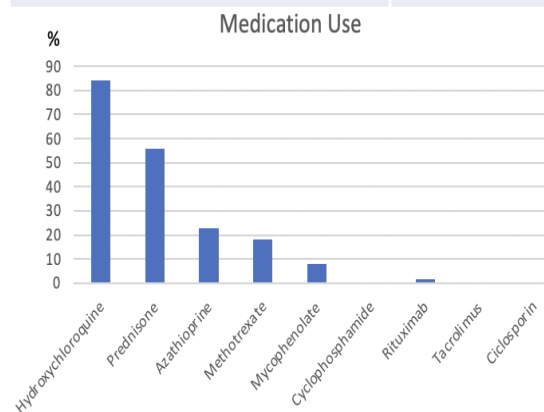
Patient demographics	Number (%) (n=62)
Female gender	59 (95)
Age at SLE diagnosis (mean)	35
Disease duration at enrolment (years, mean)	11
Highest attained education level:	
- Primary	2 (3)
- Secondary	20 (32)
- Tertiary	39 (63)

SLE WDHB patient ethnic breakdown

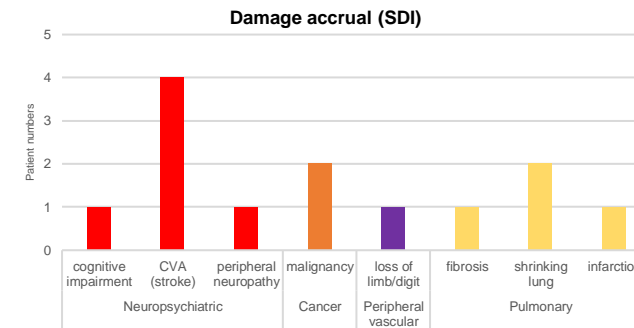


Clinical features	n (%)
Arthritis	51 (82)
Mucocutaneous	49 (79)
Haematological	28 (45)
Renal	14 (23)
Neurological	3 (5)

Flare/LLDAS achievement	N (%) [n=62]
LLDAS ever attained	56/62 (90)
LLDAS not attained by ethnicity:	6/62 (10)
• Asian	1/27 (4)
• Euro	3/25 (12)
• Pasifika	1/5 (20)
• Other	1/2 (50)
Ever flare	24/62 (39)
Flares by ethnicity:	
• Asian	8/27 (30)
• Euro	10/25 (40)
• Pasifika	2/5 (40)
• Maori	2/3 (67)
• Other	2/2 (100)
Severe flare	6/62 (10)



Mean SLICC damage index (SDI) score: 0.22 (0 - 47)



Lupus nephritis LN (n=14)	n (%)	n (%)
Lupus nephritis by ethnicity:	% of all LN	% of entire group by ethnicity
• Asian	10/14 (71)	10/27 (37)
• Pasifika	1/14 (7)	1/5 (20)
• Euro	3/14 (21)	3/25 (12)
Class III/IV lupus nephritis by ethnicity	Total = 7	
• Asian	5/7 (71)	5/27 (19)
• Pasifika	1/7 (14)	1/5 (20)
• Euro	1/7 (14)	1/25 (4)

Conclusion

- First prospective SLE study in NZ
- Majority of patients were able to achieve LLDAS state
- Maori patients had more lupus flares
- Pasifika patients were less able to achieve LLDAS state
- Majority of lupus nephritis patients are Asians
- Higher proportion of active proliferative lupus nephritis in Asian and Pasifika patients

Supported by New Zealand Rheumatology Association grant