The study of the epidemiology, prognosis, co-morbidities and the mortality of patients with Systemic Lupus Erythematosus in South Sweden and in Iceland

Background

Systemic lupus Erythematosus (SLE) is a chronic systemic autoimmune disorder of an unknown etiology that causes multiorgan disease, most notably with joint and skin manifestations but also internal organ manifestations such as hematological disease, serositis, glomerulonephritis and central nervous system disease and is much more frequent in females.

Research question

• To describe the incidence and prevalence of an unselected group of SLE patients in Southern Sweden observed for nearly three decades and analyze secular trends.
• To study the long-term prognosis in patients with SLE by analyzing disease burden and causes of death.
• To analyze co-morbidities; cardiovascular disease, acute myocardial infarction and stroke within a defined population and whether risk factors at diagnosis can predict morbidity and mortality.
• To study the epidemiology of SLE in a nationwide cohort of SLE patients using validated methods developed prior to and in this study

Preliminary results

The incidence of SLE in younger females remained stable from 1981 to 2006. However, in middle aged women the incidence was substantially reduced in the latter half of the study period. Disease phenotypes have not altered during the observation period.

Mortality rates are significantly raised amongst SLE patients compared to the general population. The mortality rates have not changed significantly during the observation period. The main cause of death in SLE patients was due to cardiovascular disease and this finding was consistent over time.

SLE patient’s area at risk of developing early myocardial infarctions and cerebrovascular disease compared to the population. Patients with a younger age at diagnosis usually
develop myocardial infarctions after a longer disease duration compared to older patients.

The epidemiology of SLE in Iceland remains to be studied.

Significance

The Lund SLE cohort represents an unselected group of patients that have been followed in a structured program for nearly 30 years. That provides an opportunity to analyze all facets of the disease and understands how it behaves over time. By analyzing both the number of patients and its comorbidities we can be much better prepared to meet the needs of the patients now and the demands in the future.

Publications

1) Variations in the epidemiology of systemic lupus erythematosus in southern Sweden.


The second publication in under review in the Journal of Rheumatology and was submitted in September this year;

2) Mortality in patients with Systemic Lupus Erythematosus in southern Sweden

Ingvarsson RF, Landgren AJ, Bengtsson AA and Jönsen A

We are working on the third publication where I am the second author;

3) Cardiovascular disease in SLE at one center between 1981 and 2016. A population-based study highlighting the importance of disease duration and age at diagnosis.

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4) The fourth part of the project is still in its infancy. We plan to study the epidemiology of LE in Iceland from 1975-2015 in a collaboration with Landspitali University Hospital in Iceland and the department of Rheumatology.