improvement' was mentioned in 4 cases, while arthritis was improved in 6 patients, 4 of which had secondary SS.

In terms of extraglandular manifestations (e.g., cryoglobulinemic vasculitis, interstitial nephritis) 18 were reported. 16 (88.8%) patients received Rituximab (one of them in combination with Bellimumab), while 2 (11.1%) were treated with TNF-inhibitors. 11.1% and 61.1% of them received concurrent treatment with csDMARDs and steroids, respectively. 55.5% and 11.1% of the patients were csDMARDs-, and biologics- experienced, respectively. Extraglandular manifestations responded well in the majority (83.3%) of the patients, with the remaining having partial or late response. SS and arthritis 'improvement' was mentioned in 5 and 1 patients, respectively.

Table 1 Biologic treatments used for overlapping autoimmune conditions in SS patients. csDMARDs: conventional synthetic Disease Modifying Antirheumatic Drugs. NA: Not Applicable, Joints: improvement of arthritis. *SS response was defined as clinical improvement of sicca symptomatology or improvement in ESS-International Collaborating Clinics (SLICC)/ACR damage index (SDI), Cox’s regression analysis, chi-square test, Kruskal-Wallis test and ANOVA were employed as appropriate.

**Results:** Thirty-three out of 692 patients were diagnosed with SLE before the age of 12, 172 between 12 and 20, 443 between 21 and 50 and 44 after 50 years of age. As previously reported, a female preponderance was more evident in the central part of the age spectrum (p=0.015). Nephritides and decreased complement were more frequent in patients with early-onset SLE (p=0.001 and p=0.033 respectively), serositis in the central age groups (p=0.025), and arthritis in late-onset patients (p=0.002). Neuropsychiatric manifestations were less frequent in patients aged <50 years (p=0.013; table 1). The global incidence rate for any damage was 48.36 per 1000 persons-years, whereas the death incidence rate was 8.54 per 1000 persons-years. Late-onset SLE associated with a higher risk of damage accrual (HR=1.63, p=0.024) and of death (HR=6.22, p<0.001). However, there were no significant differences in the time to first damage, to death after diagnosis and to death after the development of the first damage item, according to the age of diagnosis.

**Conclusions:** Younger patients with SLE show a distinct clinical phenotype, but share an accelerated accrual of morbidity and a higher risk of early mortality with patients of older age. Identifying age-specific predictors of disease severity will be of outstanding importance to improve long-term survival rates and patients’ quality of life.

**REFERENCES:**

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**THU0355**

**DAMAGE ACCRUAL AND MORTALITY RATES AMONG DIFFERENT AGE GROUPS IN A COHORT OF PATIENTS WITH LUPUS**


**Background:** Systemic lupus erythematosus (SLE) is a chronic, multi-system autoimmune disease, characterised by relapses and remissions, which eventually can lead to progressive, irreversible organ damage accrual. SLE-related damage implies increased morbidity and impaired quality of life. In addition, it constitutes itself a risk factor for the development of further damage and associates with early mortality. Age at disease onset has been postulated to affect the presenting clinical phenotype, the rate and likelihood of accruing damage and eventually mortality. Age was 48.36 per 1000 persons-years, whereas the death incidence rate was 8.54 per 1000 persons-years. Late-onset SLE associated with a higher risk of damage accrual (HR=1.63, p=0.024) and of death (HR=6.22, p<0.001). However, there were no significant differences in the time to first damage, to death after diagnosis and to death after the development of the first damage item, according to the age of diagnosis.

**Conclusions:** Younger patients with SLE show a distinct clinical phenotype, but share an accelerated accrual of morbidity and a higher risk of early mortality with patients of older age. Identifying age-specific predictors of disease severity will be of outstanding importance to improve long-term survival rates and patients’ quality of life.

**REFERENCES:**

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**THU0356**

**SYNERGISTIC EFFECT OF CUMULATIVE CORTICOSTEROID DOSE AND IMMUNOSUPPRESSANTS ON AVASCULAR NECROSIS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS**

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**Background:** Avascular necrosis (AVN) is one of the most common organ damage in patients with systemic lupus erythematosus (SLE) and often causes serious physical disability. **Objectives:** The aims of this study were to investigate clinical risk factors associated with symptomatic AVN and to analyse their synergistic effects in a large SLE cohort in Korea. **Methods:** Patients with SLE were enrolled and followed from 1998 to 2014 in the Hanyang BAE Lupus cohort, in whom damage was measured annually according to the Systemic Lupus International Collaborating Clinics/American College of Rheumatology Damage Index. AVN was confirmed by imaging study if patients had symptoms. To determine risk factors for AVN, clinical, laboratory, and therapeutic variables were analysed by logistic regression. Relative excess risk due to interaction (RERI), attributable proportion (AP), and synergy index (S) were calculated to measure interactions between significant variables. **Results:** Among 1,219 SLE patients, symptomatic AVN was the most common type of musculoskeletal damage (10.8%, n=132). SLE patients with AVN showed an earlier onset age, demonstrated AVN more commonly in conjunction with certain other clinical manifestations such as renal and neuropsychiatric disorders, and received significantly higher total cumulative corticosteroid dose and immunosuppressive agents than did patients without AVN. However, in multivariable analysis, only two variables including use of a cumulative corticosteroid dose greater than 20 g (odds ratio (OR) 3.09, p=0.005) and use of immunosuppressants including cyclophosphamide or mycophenolate mofetil (OR 4.34, p=0.002) remained as significant risk factors for AVN. Patients with cumulative corticosteroid dose >20 g and immunosuppressants used had a...