THU0352

ASSOCIATION BETWEEN MEMORY B-CELLS AND PHENOTYPIC FEATURES OF SJÖGREN’S SYNDROME

Background: B-cell disturbances are a hallmark of pSS and play a pivotal role in the disease pathogenesis and clinical evolution, and may as well have a potential role in diagnosis. In pSS, an increase of the naïve subset and a decrease of memory B-cells have been reported. A decreased frequency of memory cells has also been identified in patients with Sicca syndrome without criteria for pSS.

Objectives: Our study aims to evaluate the distribution of B-lymphocyte subpopulations in pSS and Sicca patients and to establish cut-off points for pSS classification in relation to healthy controls. Moreover, we aim to evaluate the relation between lymphocyte subpopulations and phenotypic features in pSS.

Methods: Fifty-seven pSS patients, 68 non-Sjögren Sicca patients and 24 healthy controls were included. Circulating B-cell frequencies were determined by flow cytometry, and the naïve and memory (switched and unswitched) subsets were characterized based on surface marker expression of the following monoclonal antibodies: CD19, CD24, CD27, Anti-IgD and Anti-IgM.

Results: Absolute memory B-cells numbers in Sicca were intermediate between those of pSS and controls. Memory B-cells in Sicca were not significantly different from pSS and controls. Moreover, we identified in patients with Sicca syndrome without criteria for pSS a significant negative correlation between the naïve subset and a decrease of memory B-cells with decreased memory B-cells represent pSS and if B-cell profiling could help in diagnosis of pSS, 12.5% of controls and 37.3% of Sicca.

Conclusions: Decreased numbers of memory B-cell subsets clearly discriminate pSS from healthy controls. Lower memory B-cells counts are associated with more active pSS disease profile. It remains to be clarified whether Sicca patients with decreased memory B-cells could represent pSS and if B-cell profiling could help in the diagnosis of pSS.

Disclosure of Interest: None declared


THU0354

IMPACT OF BIOLOGIC THERAPY IN SJÖGREN’S SYNDROME PATIENTS WITH OVERLAPPING AUTOIMMUNE DISEASES OR EXTRAGLANDULAR MANIFESTATIONS. A SYSTEMATIC REVIEW OF LITERATURE

Background: Treatment of Sjögren’s syndrome (SS) has traditionally focused on conventional synthetic DMARDs (csDMARDs), with encouraging evidence on the benefit of biologic therapies emerging, mainly for treatment of SS extraglandular manifestations. Overlapping autoimmune diseases in SS are poorly studied; yet evidence primarily from case reports suggest a beneficial effect with biologics.

Objectives: To systematically review the literature on the treatment of SS with biologics, taking a focus on case reports and overlapping autoimmune conditions or extraglandular manifestations (defined here as those described in the EULAR SS disease activity index - ESSDAI).

Methods: A literature review was performed independently by two reviewers, using Pubmed and the following search terms: “Sjögren” or “Sjögren’s” AND any of the following: “biologics”, “Etanercept”, “Adalimumab”, “Infliximab”, “Golimumab”, “Certolizumab”, “Tocilizumab”, “Abatacept”, “Rituximab”, “Belimumab”, “Secukinumab”, “Ustekinumab” and “Anakinra”. Inclusion criteria were: articles in English; published until January 2018; case reports of patients with primary or secondary SS. Initial screening was based on title/abstract, followed by full-text review for articles fulfilling inclusion criteria. For articles written in a different language, information was obtained from abstract if available, otherwise excluded. Concordance in article screening was 95% across the two reviewers. Data extraction focused on reporting overlapping autoimmune diseases and extraglandular manifestations, treatment and response data.

Results: Out of 679 papers screened, 39 articles were included. 22 overlapping autoimmune conditions were reported in 22 SS patients (table 1). Most of the patients were treated with Rituximab (63.6%), while TNF-inhibitors (22.7%), Tocilizumab (9.1%) and Ustekinumab (4.5%) were also used. Concurrent treatment with csDMARDs and steroids was used in 28.6% and 42.9% of the cases, respectively. 61.9% and 13.6% of the patients were csDMARDs- and biologic- experienced, respectively. Good response of overlapping condition was seen in 86.4% of them, while in 13.6%, control or partial response was reported. Although, most of the studies do not mention the effect of biologic treatment on SS, general
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 Belimumab), 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.

Conclusions: Treatment with biologic DMARDs, sometimes accompanied by steroids, appears to be beneficial also in treating overlapping autoimmune diseases as well as some extraglandular manifestations in SS patients.

Disclosure of Interest: None declared

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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) 3.08, 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 use had a