Conclusions: There is a progressive drift towards lower number of swollen and tender joints and lower CRP-levels at trial entry of time, which is at least partly related to a similar trend in inclusion criteria for RA. The constancy of patient-reported outcomes suggests that the baseline activity is still perceived as similarly high. Differences in overall baseline inflammatory activity may pose a challenge for comparing newer with older trial results.

Disclosure of Interest: None declared


SAT0689

THYMECTOMY IN PATIENTS WITH MYASTHENIA GRAVIS AND THE RISK OF AUTOIMMUNE RHEUMATIC DISEASES: A NATIONWIDE COHORT STUDY

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Background: Previous studies have shown myasthenia gravis (MG) and autoimmune rheumatic diseases (ARDs) share common pathogenetic mechanisms. Objectives: Therefore, the present study investigated the possible relationship between MG and ARDs.

Methods: We analysed Taiwanese medical data from the Registry of Catastrophic Illness and identified patients with MG. From the entire general population data of the National Health Insurance Research Database, we randomly selected a comparison cohort that was frequency-matched by age (in 5 year increments), sex, and index date. We analysed the risk of ARDs by using a Cox proportional hazards regression model stratified by sex, age, and treatment.

Results: We enrolled 6478 patients with MG (58.03% women; mean age, 50.55 years) and 25,912 age- and sex-matched controls in the present study. The risk of total ARDs was 6.25 times higher in the MG cohort than in the non-MG cohort after adjustment for age and sex. Furthermore, the MG cohort was associated with a significantly higher risk of primary SS (pSS), SLE, and other ARD types (adjusted HRs: 4.41; 15.06; and 4.07 [95% CI: 1.31–12.91]; 11.32 [95% CI: 5.04–25.42]; and 4.07 [95% CI: 1.31–12.62], respectively). MG cohort who received thymectomy had an increased risk of RA, pSS, and SLE (adjusted HRs: 4.41; 15.06; and 23.68, respectively).

Conclusions: The present nationwide cohort study revealed an association between MG and incident ARDs. MG cohort who received thymectomy had an increased risk of RA, pSS, and SLE. Future studies are needed to elucidate the underlying pathogenesis and to translate them into clinical therapeutic options.

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SAT0690

THE ASSOCIATION BETWEEN SARCOIDOSIS AND ISCHAEMIC HEART DISEASE – A BIG DATA ANALYSIS

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Background: Sarcoidosis is an inflammatory disease characterised by the hallmark sign of non-caseating granulomas1,2. In the past decade a consensus has formed regarding the pivotal role of inflammation in atherosclerosis3. Since this discovery the association between chronic inflammatory states and ischaemic heart disease was confirmed in several rheumatic diseases4. Therefore, the constant state of inflammation to which sarcoidosis patients are exposed might pose as a risk factor for ischaemic heart disease.

Objectives: The aim of this study is to assess the relation between sarcoidosis and Ischaemic heart disease and its prognostic significance.

Methods: Based on data from Clalit Health Services (CHS), Israel’s largest health maintenance organisation, the medical records of 3993 sarcoidosis patients and 19 856 controls were acquired. Controls were matched to sarcoidosis patients according to age and sex. Chi-square and student t-tests were used in order to compare variables distribution in the cohort. Variables associated with ischaemic heart disease were assessed by logistic regression model. Log-rank test was performed for survival analysis, while Cox proportional hazards method was utilised to evaluate variables related to increased risk of all-cause mortality.

Results: Matched by sex and age – both sarcoidosis group and the control group were composed from 63% females with mean age being 56 years. Compared to the control group, sarcoidosis patients had a higher proportion of ischaemic heart disease, presenting with 856 (21.4%) cases whereas the control group had only 2999 cases (15.1%, p<0.001). The association between sarcoidosis and ischaemic heart disease was demonstrated by a multivariate analysis, (adjusted OR 1.503, 95% CI 1.361–1.660). A 15 year follow up revealed increased mortality among sarcoidosis patients – as 710 (17.8%) of sarcoidosis patients had passed away while 2121 (10.7%) deaths were reported in the control group (p<0.001). In a multivariate model, sarcoidosis patients were found to be in increased risk for all-cause mortality compared to the control group (adjusted HR 1.95, 95% CI 1.75–2.14).
ADHERENCE TO DISEASE-MODIFYING DRUGS IN BREASTFEEDING IS NOT ASSOCIATED WITH ANTI-CITRULLINATED ANTIBODIES DEVELOPMENT IN INDIVIDUALS AT RISK FOR RHEUMATOID ARTHRITIS

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Background: "Systemic autoimmunity associated with rheumatoid arthritis" (RA), is a pre-clinical stage preceding the onset of clinical RA, characterised by the presence of autoantibodies, such as anti-citrullinated protein antibodies (ACPA) or anti-carbamylated protein antibodies (antiCarP). Breastfeeding has been proposed as a protective factor for RA development,1 but there are some controversies.2 To establish the causal role of a putative risk factor, longitudinal studies are needed, in particular in the pre-stages of RA development.

Objectives: To study the association between breastfeeding and the development of systemic autoimmunity associated with RA.

Methods: This ongoing prospective study includes individuals genetically at risk of developing RA, namely first-degree relatives of RA patients (RA-FDR). Individuals without clinical evidence of RA were enrolled, and assessed yearly clinically and biologically. We included all RA-FDR women with available ACPA status (anti-CCP 2, 3.1 or 3.0) and information about breastfeeding. The primary outcome was ACPA positivity. The exposure of interest was breastfeeding and duration of breastfeeding (categorised as 0, 1–7 and ≥7 months). The presence of antiCarP was a secondary outcome. We used logistic regression to analyse univariable and multivariable associations.

Results: After screening 1131 publications and 194 other documents, 231 relevant papers were analysed for measuring adherence (60% in RA, 8% in SpA, 6% in PsA, 11% in OA and 15% in CTD), 117 for predicting non-adherence (55% in RA, 9% in SpA, 14% in gout and 22% in CTD) and 22 for improving adherence (72% in RA, 8% in SpA, 16% in systemic lupus and 4% in gout). Objective measurements of non-adherence included: delivery data (total number of use: n=92), pill counts (n=8), medication event monitoring system (n=9), blood level assessments (n=7). Subjective measurements included: patient global assessment (n=57), and 4 questionnaires. The most used questionnaire was the Morisky Medication Adherence Scale and the most widely validated in rheumatology were the Compliance Questionnaire on Rheumatology and the Medication Adherence Self-report Inventory. Around 100 predictive factors were identified. Polymedication, mood disorders, lack of information and poor physician-patient relationship were associated with lower adherence. Regarding management options for non-adherence, 13/22 studies were randomised controlled trials (1153 patients) and only 5 (38%) were positive (774 patients). Educational interventions were the most represented with the highest level of evidence: 8/13 trials (1017 patients) with 4/8 yielding positive results.

Conclusions: Despite the importance of medication adherence in CIRDs, this review revealed limitations in methods to measure non-adherence, a multiplicity of non-adherence risk factors and a relative lack of evidence on interventions to improve medication adherence. It’s important to improve the assessment and optimisation of adherence in CIRDs.

Disclosure of Interest: None declared