Background: Knowledge about interdependencies between rheumatic and musculoskeletal diseases (RMDs) and malignancies is limited on the clinical and molecular level. Particularly, valid prospective data on the timely association of malignancies in patients with RMDs and treatment of the latter are sparse.

Objectives: Due to the heterogeneous patient population, a registry-based study has been conducted in order to provide insights into mutual interdependencies and novel evidence for suitable clinical management of patients with concomitant RMD and malignancies.

Methods: The RheuMal registry is a long-term, open-end observational study designed to address the specific situation of patients suffering from concomitant RMD and concomitant malignancy and/or premalignant conditions. The RheuMal registry is one of the three subregistries of the MalHeu project, a registry-based study initiated in July 2018 at the at the university hospital Heidelberg, Germany.

Results: Data from the RheuMal registry (n=404) show an earlier onset of gender-specific cancers and malignant melanoma in RMD patients compared to data from the German Cancer Registry Data of the Robert-Koch-Institute: compared to the reference population, in RMD patients breast cancer (n=32) occurred 5.3 years and prostate cancer (n=16) 3.3 years earlier. Onset of malignant melanoma was 2.4 years earlier in females (n=9) and 1.1 years in males (n=7) with concomitant RMD. The mean latency between the initial diagnosis of the RMD and the later occurring malignant condition was 10.2 years. The diagnosis of the malignancy frequently led to a change or interruption of disease-modifying antirheumatic therapy in RMDs.

Conclusion: The RheuMal registry offers first insights into interdependencies between RMDs and malignancies based on demographic data, disease characteristics, clinical management and outcome as well as correlation of specific diagnoses and therapies. The earlier onset of gender-specific cancers and malignant melanoma suggests differences in the epidemiology and course of the malignant disease in RMD patients compared to a healthy reference population, suggesting interdependency between the two disease entities. Future research will focus on further understanding of this interdependency and the underlying molecular mechanisms.

Disclosure of Interests: None declared

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SAT0579 SYSTEMATIC GERIATRIC ASSESSMENT IN OLDER PATIENTS WITH RHEUMATIC DISEASES - THE RHEUMAGIC PILOT STUDY

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Background: Current demographic data predict that the number of older adults with rheumatic diseases will considerably increase in the coming years. Geriatric patients differ from younger adults in many ways including their clinical presentation, co-morbidities and response to medication. The management of such patients is often challenging due to the presence of multi-morbidity, polypharmacy and geriatric syndromes (i.e. conditions in which symptoms result from impairments in multiple systems rather than a discrete disease). To systematically assess geriatric patients, specific tools have been developed; however, they are not routinely utilized by rheumatologists. Using these tools could improve patient management and satisfaction in rheumatologic care.

Objectives: To examine the prevalence of 17 common geriatric health problems using validated geriatric assessment tools in older patients with rheumatic and musculoskeletal diseases.

Methods: Adults 65 years and older who presented to a tertiary rheumatology hospital were included after informed consent. All patients recruited were assessed using the RheaMAGic Assessment (MAGIC) which addresses 14 common geriatric health problems. In addition, polypharmacy (≥5 medications), muscle function using the Short Physical Performance Battery and frailty applying the Fried definition were assessed. Disability was quantified with the “Funktionsfragebogen Hannover” (FFbH), a validated tool for patients with rheumatologic diseases that can be easily converted to Health Assessment Questionnaire (HAQ) scores. Primary outcome was the frequency of the selected 17 geriatric health problems; the correlation of the total number of problems with HAQ scores was a secondary outcome.

Results: Of the 300 individuals included 67% were female with a mean age of 73±6 years; 85% (~50% with rheumatoid arthritis) had a rheumatologic diagnosis. The remaining participants had either a chronic pain syndrome or degenerative joint/spine disease. On average participants had 7 out of 17 assessed geriatric problems. Females had more such problems than males (8 vs. 6, p<0.0001). Chronic pain and polypharmacy were most common but several others were also seen in more than 50% of patients (see Table). The mean HAQ Score was 1.67±0.79. There was a positive correlation (see Graph) between the number of problems and the HAQ Score (R²=0.44, p<0.0001).

Conclusion: A systematic geriatric assessment can be successfully used to discover and quantify geriatric health problems in older patients with rheumatic and musculoskeletal diseases. These problems appear to be very common and importantly, patients with more problems had poorer functional status. Frailty, depression, incomplete vaccination status, cognitive impairment or polypharmacy are all known to negatively impact patient care. Recognizing and addressing geriatric problems has the potential to lead to health care improvements including adherence and medication side effects and might increase patient satisfaction and functional status independent of disease activity.

References:
Geriatric Problem | % present
---|---
Lack of Social Support | 10
Incomplete Vaccinations | 53
Problems with Cognition | 31
Problems with Chronic Pain | 10
Problems with Dizziness | 44
Problems with Mobility | 41
Problems with Unintentional Weight Loss | 30
Inappropriate Medications present | 17
Polypharmacy present | 81
Frailty present | 46
Short Physical Performance Battery low | 57

**Background:** Autoimmune diseases have a broad phenotypic spectrum, with great variability in clinical manifestations. Anti-DFS70/LEDGFp75 (ANAS/DFS70) antibodies have attracted interest as a positive result in patients without clinical evidence of autoimmune systemic rheumatic disease (SARD). It has been proven in non-rheumatic inflammatory diseases and in "apparently healthy" individuals.

**Objectives:** To assess ANAS/DFS70 performance in a large population with autoimmune/autoinflammatory diseases compared with first degree relatives and healthy controls.

**Methods:** A cross-sectional study was conducted. We analysed 531 individuals between 18-65 years old, 101 rheumatoid arthritis (RA) patients (ACR/EULAR 2010 classification criteria), 137 relatives from RA, 60 psoriasis (Ps) patients (Colombian classification consensus), 47 Undifferentiated connective tissue diseases (UCTD) patients and 186 healthy controls matched by age and sex. The healthy control group were individuals who lived and work similarly like those patients whose criteria of exclusion criteria were to present autoimmune or auto-inflammatory disease, infectious, neoplasms, diabetes, antibiotic treatment, pregnancy or lactation, consanguinity with autoimmune entities. Ethical Committee approved.

The determination of ANAS-HeP2 antibodies (ANA-HeP-2 Aeskudiagnostics®), Autoantibody test SYSTEM IMMCO DIAGNOSTICS REF 11030 and ANA-HeP-2 Aeskudiagnostics® was carried out. The positive results (standard AC-2) are used as a confirmatory test the determination of ANAS / DFS70; AUTOANTIBODY TEST SYSTEM IMMCO IMMUNOLOGIC DIAOGNOSTICS (Knocked out, for the psip gene) REF 11080® and Cytobead ANA Generic Assays ref 8065 by indirect immunofluorescence-IFI technique. In addition, serum levels of C-reactive protein (PCR), erythrocyte sedimentation rate (ESR), IgG/IgA antibodies against citrullinated peptide (ACP), and rheumatoid factor (RF). Absolute and relative frequencies were established.

**Results:** 531 participants were included: RA 19%, 25.8% RA relatives, Ps, 11.3%, UCTD 8.9%, and 35% healthy controls. RA mean age was 41,8±12,2 years, female 82.2%, with ANA test(+ result) 42%. In Ps mean age 49,1±15,7 years, female 53.3%, ANA test (+) 41.7%. UCTD mean age 41.3±15.2 years, female 85,1%, and ANA test(+) 78,7%. Relative of RA mean age 38,7±12.2 years, female 73%, ANA test(+ 26.3%. And healthy controls mean age 41,3±12,2 years, female 74,7%, and ANA test(+ 26.9%

**Conclusion:** ANAS/DFS70 autoantibodies were present in very low frequency in patients with SARD. Thus, patients with a positive result tend to have a mild or non-progressing phenotype of autoimmune/inflammatory diseases, as UCTD. This is the first time ANAS/DFS70 are tested in a large population cohort in Latin American countries which coincide with previous results in RA and RA relatives.

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**SAT0581**

**OBJECTIVES:**

- To compare biological and targeted synthetic disease modifying anti-rheumatic agents (bDMARDs) and predisposing factors: A 5-YEAR RETROSPECTIVE REVIEW

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**Background:** Biological and targeted synthetic disease modifying anti-rheumatic drugs (bDMARDs) increase the risk of serious infections (SIs), however there is limited ‘real-world’ evidence comparing the relative risk of SI for individual bDMARDs.

**Objectives:** This study examines the rates of SIs in a non-select Australian Northern Queensland (NQ) cohort of patients with various rheumatic diseases receiving treatment with a bDMARD, to define predisposing factors and directly compare the bDMARDs.

**Methods:** A retrospective review was performed for all patients who received a bDMARD through the Townsville Hospital Rheumatology Department over the