higher percentage of atrial fibrillation and chronic obstructive pulmonary disease in AID patients. Compared to non-AID patients, AID patients had similar clinical ACS presentation and no differences were found with respect to revascularization strategies or medical treatment at discharge. With respect to prognosis the two groups had comparable rates of adverse events during hospitalization (10% vs 10%, $p=0.920$) with no statistically significant differences in any single event studied. However after a follow-up of 397 [375–559] years, AID patients had higher rate of combined adverse events (44% vs 28% $p<0.001$). After multivariate adjustment the presence of AID was associated with increased total mortality (hazard ratio 2.1, 95% CI 1.2 to 3.7, $p=0.008$) and it was also a borderline risk factor for higher bleeding complications (hazard ratio 2.2, 95% CI 0.9 to 5.5). The presence of AID was not an independent risk factor for neither stroke or recurrent non-fatal myocardial infarction.

Conclusions: The presence of AID did not change ACS presentation and clinical management. Although AID is not associated with worse outcomes during hospitalization it is independently linked to higher total mortality and a trend to an increased risk of major bleeding during follow-up.

Disclosure of Interest: None declared

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SAT0705 DO DIET CHARACTERISTICS IMPACT EFFECT OF A 12-MONTH VITAMIN D SUPPLEMENTATION ON 25OH-VITAMIN D SERUM LEVEL AMONG OVERWEIGHT ELDERLY?

R.M. Baddoura¹, N.A. Yaghi², A. Arabi³, G. Halaby⁴, G. El-Hajj-Fuleihan³.

¹Rheumatology, Hotel-Dieu de France, St Joseph University; ²Nutrition, School of Pharmacy, St Joseph University; ³Calcium Metabolism, American University of Beirut Medical Center; ⁴Endocrinology, Hotel-Dieu de France, St Joseph University, Beirut, Lebanon

Background: Achieving desirable 25OHvitamin D serum levels with vitamin D supplementation may be influenced by many confounders including lifestyle patterns and vitamin D receptor genetic polymorphisms.

Objectives: To test the effect of dietary intake confounding variables such total as calories, dietary intake of vitamin D, calcium, proteins, carbohydrates and fats, on the variance in serum 25-hydroxy vitamin D (25OHD) level after vitamin D supplementation.

Methods: Study population: All subjects from one out of three centers who participated in a randomized clinical trial comparing high (3750 IU/day) versus low (600 IU/day) dose of vitamin D supplementation in ambulatory overweight (BMI exceeding 25) elderly subjects (age ≥ 65 years), with serum 25OHD level between 10 and 30 ng/ml at screening.

Outcome measure: 25OHD D serum levels at 12 months of follow-up.

Confounders included gender, body mass index, baseline 25OHD serum level, genetic polymorphism of vitamin D receptor (Fok, Bsm1 and Taq) and dietary intake of vitamin D, calcium, proteins, carbohydrates, fats and total calories assessed by food frequency and 24h recall questionnaires, administered a year after the termination of the trial.

Statistical analysis: ANOVA for repeated measures and regression using STATA version 13. Numbers expressed as mean (SD).

Results: We studied 117 Participants, 62 females and 55 males, age was 71 (5) years, of who 61 received 3,750 IU of vitamin D, and 55 received 600 IU/day. Vitamin D receptor genetic polymorphisms distribution was comparable in both arms. Daily vitamin D intake excluding provided supplements was 7.59 (1.21) mcg and 8.53 (1.36) mcg from the 24 h recall, and food frequency questionnaires, respectively (p was NS between the two arms). Calories, calcium, protein, carbohydrate and fat mean intake was also similar across both arms. The high-dose group achieved significantly higher 25OH-vitamin D serum levels at twelve months 34.9 (9.3) ng/ml compared to low-dose, 21.9 (6.1) ng/ml ($p<0.0001$). Difference between arms remained significant adjusting for gender, baseline BMI, Fok, Bsm1 and Taq genetic polymorphism, baseline serum vitamin D and dietary intake of vitamin D, calcium, calories, proteins, carbohydrates and fats. None of these dietary intake measures was found to have significant contribution to the model variance. Supplementation dose was the only significant predictor of 25OHvitamin D serum levels achieved at 12 months.

Conclusions: Diet composition was not a confounder for the effect of high versus low dose vitamin D 12-month supplementation, on achieved 25OHD vitamin D serum levels.

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SAT0706 END-STAGE ORGAN FAILURE IN SARCOIDOSIS: CHARACTERIZATION AND PREDICTIVE FACTORS IN 1082 PATIENTS

R. Pérez-Alvarez¹, B. Kostov², A. González García³, R. Gómez De La Torre⁴, M. Lopez Dupla⁵, B. De Escalante⁶, A. Alguacil⁷, J. Chara⁸, J. Velilla⁹, J. Rascón¹⁰, J.S. Garcia Morillo¹¹, C. Feijoo¹², E. Fonseca¹³, M. Bonet¹⁴,

J.L. Callejas¹⁵, G. de la Red¹⁶, A.B. Madroño Vuelta¹⁷, C. Soler¹⁸, E. Peral¹⁹, J.F. Gómez Cerezo²⁰, G. Cruz²¹, P. Perez²², S. Rodríguez Fernández²³, B. Pinilla²⁴, A. Gato²⁵, M. Akasbi²⁶, A. Robles²⁷, I. Ojeda²⁸, M.J. Vives²⁹, C. Morcillo³⁰, M. Penadés³¹, M. De Vicente³², M. Ramos-Casals³³, L. Pallarés¹⁰, P. Brito-Zerón^{30,33} on behalf of the SARCOGEAS-SEMI Registry. ¹Hosp Alvaro Cunqueiro, Vigo; ²IDIBAPS, Barcelona; ³Hosp Ramón y Cajal, Madrid; ⁴HUCA, Oviedo; ⁵Hosp Joan XXIII, Tarragona; ⁶Hosp Clínico, Zaragoza; ⁷Hosp Virgen de la Salud, Toledo; ⁸Hosp Josep Trueta, Girona; ⁹Hosp Miguel Servet, Zaragoza; ¹⁰Hosp Son Espases, Palma de Mallorca; ¹¹Hosp Virgen del Rocío, Sevilla; ¹²Hosp Parc Taulí, Sabadell; ¹³Hosp de Cabueñes, Gijón; ¹⁴Althaia, Manresa; ¹⁵Hosp Clínico San Cecilio, Granada; ¹⁶Hosp Esperit Sant, Santa Coloma; ¹⁷Hosp San Jorge, Huesca; ¹⁸Hosp de Sta Caterina, Girona; ¹⁹Hosp Virgen Macarena, Sevilla; ²⁰Hosp Infanta Sofía, Madrid; ²¹Hosp de Poniente, Almería; ²²Hosp Puerta del Mar, Cádiz; ²³Hosp da Barbanza, A Coruña; ²⁴Hosp Gregorio Marañón, Madrid; ²⁵CH, Albacete; ²⁶Hosp Infanta Leonor; ²⁷Hosp la Paz, Madrid; ²⁸Hosp Valle del Guadiato, Córdoba; ²⁹San Joan de Déu, San Boi; ³⁰Hosp CIMA-Sanitas, Barcelona; ³¹Hosp de Manises, Valencia; ³²Hosp Nuestra Señora del Prado, Talavera; ³³Hosp Clínic, Barcelona, Spain

Objectives: To characterize the main features at presentation of sarcoidosis associated with the development of end-stage organ failure in a large multicenter cohort of patients from Southern Europe.

Methods: In January 2017, the Spanish National Registry of Sarcoidosis (SARCOGEAS-SEMI) included 1082 consecutive patients diagnosed with sarcoidosis according to the ATS/ERS/WASOG 1999 statement and extrathoracic involvement to the 2014 WASOG instrument. The development of end-stage organ failure was assessed at the last visit.

Results: The cohort consisted of 618 (57%) women and 464 (43%) men, with a mean age at diagnosis of 47yrs. After a mean follow-up of 82 months, 90 (8%) patients developed end-stage organ failure, including respiratory failure ($n=56$), chronic renal failure ($n=13$), cardiac failure/permanent cardiac device ($n=8$) and liver cirrhosis ($n=3$). The following baseline features were associated with end-stage organ failure in the univariate analysis: patients born in Spain ($p=0.008$), a higher mean age at diagnosis ($p<0.001$) and a radiological stage III/IV ($p<0.001$) With respect to extrathoracic involvement, spleen ($p=0.015$), renal ($p=0.001$), cardiac ($p=0.028$) and bone marrow ($p=0.003$) involvements, hypercalcemia ($p=0.018$) and use of corticosteroids ($p<0.001$) were associated with end-stage organ failure, while patients with cutaneous sarcoidosis had a lower risk ($p=0.029$). Multivariate analysis identified age at diagnosis (OR 1.05), radiological stages III/IV (OR 3.12) and use of corticosteroids (OR 4.55) as independent variables associated with the development of end-stage organ failure.

Conclusions: Nearly 10% of patients with sarcoidosis developed end-stage organ failure. Respiratory failure represented two thirds of cases of sarcoidosis-related organ failure, followed by renal (15% of cases) and cardiac (9%). Older patients, as well as those presenting with advanced radiological stages, had an enhanced risk of developing end-stage organ failure.

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SAT0707 EFFICACY AND SAFETY OF PROPHYLACTIC TREATMENT ON ACTIVATION OF LATENT TUBERCULOSIS DURING GLUCOCORTICOID THERAPY IN PATIENTS WITH RHEUMATIC DISEASES

R. Wu. Department of Rheumatology, the First Affiliated Hospital of Nanchang University, Nanchang, China

Background: More than 80% of cases of tuberculosis are the result of reactivated latent infection, and nearly all these cases could be prevented by the administration of a course of antibiotic treatment. Therefore, it is suggested screening and treatment are most beneficial for those patients taking immunosuppressive medications. Although the prevalence of latent tuberculosis infection in China was much higher than the United States on the basis of tuberculin skin testing, in China, so far, no study has been done about prophylactic treatment on prevention of tuberculosis activation during glucocorticoid therapy in patients with rheumatic diseases. Should it been recommended that all patients with rheumatic diseases be screened for the presence of active tuberculosis or LTBI before the use of long term glucocorticoid or immunosuppressive medications in China? It is reported only about 5% of immunocompetent persons with a positive test will have progression from latent infection to disease in their lifetime. and decisions about whether to treat latent tuberculosis should take into account the individual patient's risk for the development of active tuberculosis and the risks of therapy.

Objectives: To evaluate the risk of reactivation of LTBI in patients with rheumatic diseases who were undergoing prednisone use and the efficacy and safety of prophylactic treatment on prevention of tuberculosis reactivation.

Methods: 1000 patients with rheumatic diseases who were treated with prednisone were enrolled since 2012. IGRA test (the T-SPOT.TB test) were performed for all subjects. 50 patients with a IGRA-positive were administrated with rifampin for 4 months. 2-years follow-up was conducted to evaluate the risk factors of reactivation of LTBI and the efficacy and safety of rifampin treatment on prevention of tuberculosis reactivation.

Results: the IGRA-positive rates were 20.6% (206/1000). Forty-eight patients with a IGRA-positive finished the treatment with rifampin for 4 months. 2-years follow-up shows no latent tuberculosis developed into active tuberculosis in the patients with prevention of rifampin, while 3 (0.38%) patients with negative IGRA and 22 (10.7%) patients with positive IGRA without rifampin treatment developed into active tuberculosis. 25 patients had active tuberculosis disease in two years, which 24 patients with SLE and one patient with systemic vasculitis while 20 cases had pulmonary tuberculosis, 3 cases had vertebral tuberculosis and tuberculous peritonitis, tuberculous meningitis was 1 case, respectively. Univariate analysis showed that age, entities of rheumatic disease, dosage of glucocorticoid, DMARDs using, comorbidity with interstitial lung disease and cancer were significantly associated with tuberculosis activation ($P < 0.05$), with the ORs of 0.959, 0.592, 4.45, 0.226, A3.51 and 69.9, respectively. Entities of rheumatic diseases, Dosage of glucocorticoid, DMARDs using, comorbidity of cancer entered the final multivariate Logistic model. No severe adverse effects occurred in all subjects.

Conclusions: Medium or high dosage of glucocorticoid treatment appears to increase the risk of activation of latent tuberculosis infection. Latent tuberculosis activation could be safely prevented by 4-months rifampin treatment while starting glucocorticoid and DMARDs therapy.

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SAT0708 SYMPTOMS INDICATIVE OF INFLAMMATORY ARTHRITIS ARE COMMON IN THE PRIMARY CARE POPULATION: FINDINGS FROM THE SYMPTOMS IN PERSONS AT RISK OF RHEUMATOID ARTHRITIS SURVEY

S.L. Hider^{1,2}, S. Muller¹, J. Prior¹, T. Helliwell¹, D. van Schaardenburg³, A. van der Helm-van Mil⁴, K. Raza⁵, C.D. Mallen¹. ¹Arthritis Research UK Primary Care Centre, Keele University, Keele; ²Haywood Academic Rheumatology Centre, Haywood Hospital, Staffordshire, United Kingdom; ³Reade, Amsterdam; ⁴Department Rheumatology, Leiden University Medical Centre, Leiden, Netherlands; ⁵Rheumatology Research Group, College of Medical and Dental Sciences, University of Birmingham, Birmingham, United Kingdom

Background: Early, accurate diagnosis of RA is critical to improving outcomes. Patients with RA may develop a variety of symptoms including joint pain, swelling and stiffness. The Symptoms in Persons at Risk of Rheumatoid Arthritis (SPARRA) questionnaire was derived to assess the presence, severity and impact of common symptoms in patients at risk of RA (1). However, to date there is little data available on how common these symptoms are in primary care consulters.

Objectives: To describe the prevalence of self-reported inflammatory joint symptoms in primary care patients consulting for both musculoskeletal and non-musculoskeletal complaints.

Methods: Questionnaires were sent to 10161 individuals, of whom 5050 had consulted primary care for musculoskeletal problems. The remainder were matched to this sample by age, gender and general practice and had consulted for any non-musculoskeletal indication. Respondents provided data on presence of common symptoms such as joint pain, stiffness and swelling. The prevalence of these symptoms, their severity and impact was compared between musculoskeletal and non-musculoskeletal consulters.

Results: 4549 people responded to the survey (adjusted response 45.8%) of whom 52.3% were in the musculoskeletal consultation group. The mean (SD) age was 61.6 (14.8) years and 58.9% were female. Symptoms commonly associated with inflammatory arthritis were common in both groups. 89.1% of musculoskeletal consulters reported current joint pain, compared with 74.9% in the non-MSK consuler group, 48.7% of MSK consulters reported joint swelling compared to 37.3% of non-MSK consulters and 77.9% of MSK consulters reported joint stiffness (64.3% in non-MSK group). A similar proportion in each group reported fatigue (59.5% vs 55%). Joint symptoms remained common symptoms in both groups even when severity and impact of symptoms was considered.

Conclusions: Although symptoms such as joint pain, swelling, and stiffness are predictive of inflammatory arthritis, a large proportion of those consulting primary care for non-musculoskeletal reasons routinely report these symptoms when prompted. This compounds the challenges of diagnosing inflammatory arthritis in a non-specialist setting where new approaches are needed to ensure accurate, early diagnosis, facilitating a treat to target approach.

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SAT0709 MORTALITY PREDICTION IN MIXED CONNECTIVE TISSUE DISEASE

S. Reiseter¹, R. Gunnarsson², T.M. Aaløkken³, M.B. Lund⁴, J. Corander⁵, Ø. Molberg⁶. ¹Institute of Clinical Medicine, University of Oslo, Norway; ²Dept. of Rheumatology; ³Dept. of Radiology and Nuclear Medicine; ⁴Dept. of Respiratory Medicine, Oslo University Hospital; ⁵Institute of Basic Medical Sciences; ⁶Institute of Clinical Medicine, University of Oslo, Oslo, Norway

Background: Mixed Connective Tissue Disease (MCTD) is a chronic, immune-mediated disorder defined by the combined presence of serum anti-ribonucleoprotein (RNP) antibodies and selected clinical features of Systemic Sclerosis, Systemic Lupus Erythematosus, Rheumatoid Arthritis and Polymyositis. Several clinical manifestations and laboratory findings have been found to be associated to increased risk of mortality in univariable analyses (1).

Objectives: Here we present a mortality predicting model in a long-term observational unselected nationwide cohort aiming to enhance the knowledge of long-term prognosis in MCTD.

Methods: 135 patients were included from our nationwide MCTD cohort. Abnormal high resolution computed tomography (CT) findings of ground glass attenuation and reticular patterns were defined as Interstitial Lung Disease (ILD) and expressed as percentage of Total Lung Volume (TLV). Pulmonary function tests and laboratory tests were performed within 2 months of the HRCT examination. Pleuritis was defined as typical pleurisy for more than one day, pleural effusions or pleural rub present at or before baseline. Pericarditis was defined as typical pericardial pain for more than one day, pericardial effusion, pericardial rub or pericarditis by electrocardiography at or before baseline. Myositis was confirmed by muscle biopsy and/or electromyogram and CK elevation at or before baseline. Cox regression analyses were used to find the predictive factors of mortality. Variables at a significant level of $P < .25$ were considered a candidate in the prediction model by manual backward elimination procedure.

Results: 21 patients died after a mean (standard deviation) observation of 9 (2) years. The predictive model is shown in Table 1. According to the Harrell's C index, patient outcomes were accurately predicted by this model 85% of the time.

Table 1

	Univariable			Multivariable		
	HR	95% CI	P value	HR	95% CI	P value
Pericarditis ever	4.0	1.6–9.7	0.003	5.5	1.9–16.0	0.002
Male gender	2.5	1.1–5.9	0.038	5.8	1.9–17.9	0.002
% ILD of TLV	1.1	1.03–1.1	0.001	1.1	1.0–1.1	0.010
DLCO <60%	3.1	1.3–7.5	0.011	3.1	1.0–9.2	0.046
Agegroups* at diagnosis	1.8	1.4–2.4	<0.001	1.9	1.4–2.5	<0.0001
Baseline ESR >30 mm	3.3	1.4–7.7	0.007			
FVC <75%	3.6	1.4–8.8	0.006			
Arthritis present at or before baseline	2.1	0.85–5.2	0.109			
Pleuritis ever	2.2	0.81–6.1	0.121			
Baseline Hb <12 g/dL	2.7	1.0–7.0	0.041			
Myositis	0.22	0.03–1.7	0.144			

*Patients were divided in 6 age groups at diagnosis (<25 years, 26 to 35 years, 36 to 45 years, 46 to 55 years, 56–65 years and above 65 years). FVC = Forced Vital Capacity % of predicted, DLCO = diffusing capacity of the lung for carbon monoxide % of predicted, ESR = erythrocyte sedimentation rate, TLV = total lung volume, Hb = Haemoglobin.

Conclusions: The strongest predicting factors of mortality in MCTD is increasing % ILD of TLV, pericarditis, male gender, DLCO less than 60% of predicted and increasing age at diagnosis.

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SAT0710 RENAL FUNCTION CONTRIBUTE TO RISK OF CARDIOVASCULAR DISEASE IN RHEUMATOID ARTHRITIS

S. Hannawi¹, I. Alsalmi². ¹Rheumatology, Ministry of Health and Prevention of UAE, Dubai, United Arab Emirates; ²Renal, Royal Hospital, Muscat, Oman

Background: The excess mortality associated with rheumatoid arthritis (RA) is due largely to cardiovascular disease. This highest risk is not related primarily to traditional cardiovascular/atherosclerosis risk factors. The presence of RA independently, as well as high inflammation associated with RA has been reported as a cardiovascular risk factors. Also, subclinical decreased kidney function has been identified as an independent risk factor for CV events in patients with RA. The potential impact of impaired kidney function on atherosclerosis in RA requires more elucidation.

Objectives: To assess the role of renal parameters, alongside with inflammation and traditional cardiovascular risk factors in predicting cardiovascular disease; as manifested by carotid intima media thickness (cIMT), among RA population.

Methods: cIMT measurement was carried out in 68 RA patients, and correlated with renal function parameters with adjustment for traditional CV risk factors and RA associated inflammation. Glomerular filtration rate (GFR) was estimated with the abbreviated Modification of Diet in Renal Disease formula. Linear regression determined the association between renal parameters and the thickness of cIMT.