

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.

Disclosure of Interest: None declared

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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

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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.

References:

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SAT0709 MORTALITY PREDICTION IN MIXED CONNECTIVE TISSUE DISEASE

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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.

References:

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

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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.