

ICU admission rate and in-hospital mortality rate were not different between the two groups during the observation. This result was consistent in the sensitivity analysis where same analysis was performed in the post-matched population. Thirty-four cases of ADRs of TMP-SMX occurred, with an incidence rate (95% CI) of 24.2 (17.3–33.0) per 100 person-year. There were two cases of serious ADR (one pancytopenia and one Steven's Johnson syndrome) but they all recovered shortly after the discontinuation of TMP-SMX. The number needed to harm (NNH) of serious ADR was 109 whereas the number needed to treat (NNT) to prevent one case of PCP in the whole population was 52.

Conclusions: In patients with rheumatic disease receiving prolonged, high-dose steroid treatment, TMP-SMX prophylaxis significantly lower the incidence of PCP with favorable safety.

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Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.2803

OP0078 THE LONG TERM PROGNOSTIC SIGNIFICANCE OF PULMONARY HYPERTENSION IN SARCOIDOSIS - A BIG DATA ANALYSIS

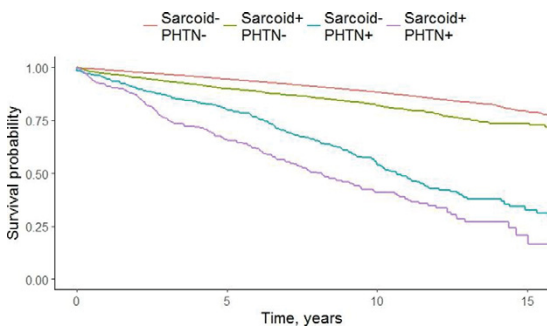
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Background: Sarcoidosis is a multisystem, chronic, progressive, granulomatous disease. Sarcoidosis-associated pulmonary hypertension is well described, but not common complication of sarcoidosis¹. In small scale studies, it has been previously described as a manifestation of advanced disease and was found to be associated with increased morbidity and mortality². Previous studies have shown that treatment may be safe and improve pulmonary hemodynamics in sarcoidosis-associated pulmonary hypertension^{3,4}. However, big data analyses regarding the exact magnitude and prognosis of sarcoidosis-associated pulmonary hypertension are lacking.

Objectives: To assess the long-term prognostic significance of sarcoidosis-associated pulmonary hypertension using a big data registry with a 15-year follow-up period.

Methods: Utilizing the medical records of Clalit Health Services, the largest HMO in Israel, we extracted a cohort consisted of sarcoidosis patients along with their age-and-sex matched controls. Dates of registration in the medical records of sarcoidosis, pulmonary hypertension and death, as well as anthropometric information and medical comorbidities were extracted from the database. To compare the distribution of variables across the cohort strata, univariate analysis was performed using Chi-square and student t-test. Multivariate analysis using a logistic regression model was used to find variables associated with pulmonary hypertension. Survival analysis using cox proportional hazards method and log-rank test was performed to find variables associated with increased risk of all-cause mortality.

Results: The cohort included 3,993 sarcoidosis patients and 19,856 age-and-sex matched controls. The mean age of both groups was 56, and both consisted about 63% females. Pulmonary hypertension was observed among 269 sarcoidosis patients (6.74%) vs. 400 controls (2.01%), $p < 0.001$. In multivariate analysis, sarcoidosis was found to be independently associated with diagnosis of pulmonary hypertension (OR 3.09, 95% CI 2.6–3.67). After more than 15 years of follow-up, 710 (17.8%) of the sarcoidosis patients had died, compared to 2121 (10.7%) of the controls ($p < 0.001$). In multivariate survival analysis, both sarcoidosis and pulmonary hypertension were found to be significantly associated with increased risk to all-cause mortality (HR 1.83, 95% CI 1.66–2.02 and HR 2.32, 95% CI 2.05–2.63, respectively).



Conclusions: Sarcoidosis-associated pulmonary hypertension is associated with poor prognosis. Proper screening methods are recommended to assess whether early identification and treatment may improve life expectancy.

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Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.4464

OP0079 BODY FAT PERCENTAGE AND WAIST CIRCUMFERENCE WERE ASSOCIATED WITH THE DEVELOPMENT OF RHEUMATOID ARTHRITIS – A DANISH FOLLOW-UP STUDY

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Background: Several studies have investigated the association between overweight and the development of rheumatoid arthritis (RA) and have come out with conflicting results. Body Mass Index (BMI) has been the preferred surrogate measure for overweight in these studies. However, BMI correlates only modestly with total amount of body fat and does not reflect fat distribution.

Objectives: To investigate the association between BMI, waist circumference, bio-impedance-derived total body fat percentage and the incidence of RA.

Methods: A population-based cohort study conducted within the Danish Diet, Cancer and Health cohort, which included individuals aged 50 to 64 years at the recruitment in the period between 1993 and 1997. Body fat composition measurements and data on lifestyle factors were collected at the enrolment into the cohort. The participants who subsequently developed RA were identified via linkage to The Danish National Patient Registry. The participants were followed until development of RA, death, loss to follow-up or October 2016, whichever came first. Data were analyzed by Cox proportional hazards regression model with delayed entry and age as the underlying time variable. Analyses were stratified by gender. Cox regression analyses with restricted cubic spline were carried out to elucidate the dose-response association between anthropometric measures and risk of RA. Smoking, socio-economic status, alcohol consumption, physical activity and intake of n-3 fatty acids were included in multivariate analyses as potential confounders.

Table 1. Cox proportional hazard ratios for association between body composition measurements and incidence of RA

Variable	Hazard ratio (95% confidence interval)) Multivariable adjusted*	
	Men	Women
BMI <18.5 kg/m ²	N/A	0.86 (0.21–3.48)
BMI 18.5–24.99 kg/m ²	1 (ref)	1 (ref)
BMI 25–29.99 kg/m ²	0.83 (0.55–1.24)	1.48 (1.14 – 1.91)
BMI >30 kg/m ²	0.69 (0.37–1.30)	1.54 (1.09 – 2.17)
Abdominal obesity (waist circumference >102 cm for men, >88 cm for women)		
No	1 (ref)	1 (ref)
Yes	1.16 (0.75–1.80)	1.24 (0.96–1.61)
	Hazard ratio (95% confidence interval) per 1% increment of body fat Multivariable adjusted*	
	Men	Women
Fat percentage	0.99 (0.96–1.03)	1.03 (1.01–1.05)

*Adjusted for age, smoking status, total tobacco consumption (g/day), smoking duration, alcohol consumption (g/day), socio-economic status, physical activity (Metabolic Equivalent of Task, MET), total intake of n-3 fatty acids.

