($p < 0.001$ / $p < 0.001$, respectively). ESSDAI had moderate correlation with the number of synovitis ($r = 0.302$, $p = 0.003$) and tenosynovitis ($r = 0.343$, $p = 0.001$) on US. In pSS patients, US detected 225% more erosions than X-ray. Anti-CCP was more frequent in RA patients (85%) than in pSS (16.5%) ($p < 0.001$). Anti-CCP was more frequent in pSS patients (16.5%) than in healthy controls (4.1%) ($p = 0.010$). In addition, this reactivity was associated with higher mean numbers of erosions in wrists ($p = 0.018$) and proximal interphalangeal joints ($p = 0.001$) on US in pSS patients.

Conclusion: US detected higher frequencies of tenosynovitis and erosions in pSS patients than in healthy controls, and the numbers of synovitis and tenosynovitis correlated with ESSDAI, suggesting that US is an important tool for the evaluation of these patients. Moreover, grade 2/3 synovitis and moderate/large erosions appear to be relevant for the distinction between pSS and RA. The additional observation that erosions are associated with anti-CCP in pSS seems to characterize a subgroup of patients with a severe underlying mechanism of joint damage. Grant from FAPESP: 2015/03756-4.

REFERENCES:

- [1] Riente L, Scirè CA, Delle Sedie A, et al. Ultrasound imaging for the rheumatologist. XXIII. Sonographic evaluation of hand joint involvement in primary Sjögren's syndrome. *Clin Exp Rheumatol*. 2009;27(5):747-50.

Disclosure of Interests: Lissiane Guedes: None declared, Elaine Leon: None declared, Margarete Vendramini: None declared, Tamiris Bocate: None declared, Karina Bonfiglioli Speakers bureau: Has received speaking fees from Roche, Pfizer, Bristol-Myers Squibb, Abbvie and Janssen., Eloisa Bonfa: None declared, Sandra Pasoto: None declared
DOI: 10.1136/annrheumdis-2019-eular.4336

FRI0249

THE RISK OF VENOUS THROMBOEMBOLIC EVENTS IN ADULT PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS: SYSTEMATIC REVIEW AND META-ANALYSIS

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Background: Although observational studies suggest people with systemic lupus erythematosus (SLE) have a heightened risk of venous thromboembolic events (VTE), meta-analyses that integrate evidence across studies to estimate the pooled risk have not been performed.

Objectives: To conduct a systematic review and meta-analysis to estimate the risk of VTE including pulmonary embolism (PE) and deep vein thrombosis (DVT) in patients with SLE.

Methods: We conducted a systematic review using MEDLINE and EMBASE from inception to March 2018 to identify observational studies (cohort and cross-sectional) that evaluated the risk of several major cardiovascular outcomes in patients with SLE compared to a general population or healthy controls (protocol published in PROSPERO 2018 CRD42018098690). Here we report the results for venous thromboembolic outcomes. Studies were included that provided effect estimates (relative risks or hazard ratios) for the calculation of pooled effect estimates. Random effects models were used to calculate pooled risk ratios (RR) and 95% confidence intervals (CI) separately for VTE, PE and DVT. Visualization of funnel plots and the Egger's test were used for evaluation of publication bias. The robustness of the results was tested using the leave one out function. Sensitivity analysis assessed the impact of removing high risk of bias studies (i.e. cross-sectional).

Results: A total of 9 studies were identified for inclusion into the meta-analysis; 7 for VTE (including two cross-sectional studies), 3 for DVT and 4 for PE. Meta-analysis of the VTE studies showed a significantly increased RR of 3.67 (95% CI: 2.10 to 6.42) for patients with SLE compared to a general population. Removing the two cross-sectional studies did not impact the results (RR 4.06 [95% CI: 3.12 to 5.28]). The pooled RRs for PE and DVT were 4.47 (95% CI: 1.79 to 11.15) and 5.51 (95% CI: 2.27 to 13.39), respectively. The statistical heterogeneity was high

with an I^2 ranging between 92% and 99%. Visual examination of the funnel plots showed evidence of publication bias, however this was not supported by the Egger's test. The leave one out function confirmed the robustness of the results.

Conclusion: Overall, the risk of VTE was found to be significantly higher, over three- to six-fold higher, among patients with SLE compared with the general population. Future research should focus on assessing the impact of traditional and SLE-specific modifiable risk factors on VTE to further identify SLE patients most at risk to support targeting prevention and treatment strategies.

REFERENCES:

- [1] Ahlehoff O, et al. *Lupus*. 2017;26:1435–1439. Avina-Zubieta JA, et al. *Semin Arthritis Rheum*. 2015;45:195–201. Chung WS, et al. *J Thromb Haemost*. 2014;12:452–458. Dregan A, et al. *Heart*. 2017;103:1867–1873. Johannesdottir SA, et al. *J Thromb Haemost*. 2012;10:815–821. Mok CC, et al. *Clin Rheumatol*. 2010;29:599–604. Ramagopal SV, et al. *BMC Med*. 2011;9:1. Yusuf HR, et al. *J Thromb Thrombolysis*. 2014;38:306–313. Zoller B, et al. *Lancet*. 2012;379:244–249.

Abbreviations: RE, relative effects

Disclosure of Interests: Nick Pooley Consultant for: I am employed by Maverex who were paid to conduct this systematic literature review on behalf of AstraZeneca., Jinoos Yazdany Grant/research support from: Pfizer, Consultant for: AstraZeneca, Julia Langham Consultant for: I am employed by Maverex who were paid to conduct this systematic literature review on behalf of AstraZeneca., Lindsay Nicholson Consultant for: I am employed by Maverex who were paid to conduct this systematic literature review on behalf of AstraZeneca., Sue Langham Consultant for: I am employed by Maverex who were paid to conduct this systematic literature review on behalf of AstraZeneca., Nina Embleton Consultant for: I am employed by Maverex who were paid to conduct this systematic literature review on behalf of AstraZeneca., Xia Wang Shareholder of: AstraZeneca, Employee of: AstraZeneca, Barnabas Desta Employee of: AstraZeneca, Volkan Barut Employee of: AstraZeneca, Edward R. Hammond Employee of: AstraZeneca
DOI: 10.1136/annrheumdis-2019-eular.3381

FRI0250

SUBCLINICAL ATHEROSCLEROSIS IN SYSTEMIC LUPUS ERYTHEMATOSUS: COMPARABLE EFFECT OF TRADITIONAL CARDIOVASCULAR RISK FACTORS WITH RHEUMATOID ARTHRITIS

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Background: Both rheumatoid arthritis (RA) and systemic lupus erythematosus (SLE) patients are associated with an increased and premature