Background: Smoking is a risk factor for primary Raynaud’s phenomenon and, in patients with systemic sclerosis (SSc), has detrimental effects on the intensity of peripheral microangiopathy[1,2]. Two studies on SSc observed a lower prevalence of anti-topoisomerase I antibodies (ATA) in ever-smokers compared to never smokers[2,3], but little is known about how the effect of smoking on autoantibody status differs in male and female patients.

Objectives: The aim of our study was to evaluate, in a cohort of SSc patients, the influence of smoking on nailfold videocapillaroscopy (NVC) patterns and autoantibody positivity, comparing findings between men and women.

Methods: We included 361 adult patients (279 women and 82 men) with SSc. At baseline NVC was performed and microvascular damage was qualitatively assessed based on normal findings, aspecific/secondary pattern, or distinct “early”, “active”, or “late” scleroderma patterns. Information about smoking status was collected, but data regarding duration and intensity were not available for all individuals, so patients were categorized as never smokers or ever smokers. The presence of SSc-specific ATA, anti-centromere (ACA), and anti-RNA polymerase III (ARA) antibodies was investigated at baseline. Chi-square was used to compare proportions and significance level was set at 0.05.

Results: No significant difference was observed in the qualitative assessment of microangiopathy between ever smokers and never smokers, nor in autoantibody positivity. Sclerosis patterns early, active, and late, were respectively present in 12%, 44% and 21% of ever-smokers, and 9%, 48%, and 29% of never-smokers. Equal proportions of NVC patterns and autoantibody positivity, comparing findings between men and women.


Table 1. microangiopathy pattern and autoantibody positivity in ever smokers and never smokers in all SSc patients and in gender-based sub-cohorts. ATA: anti-topoisomerase I, ACA: anti-centromere, ARA: anti-RNA polymerase III, NVC: nailfold videocapillaroscopy.

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Conclusion: In our large cohort of SSc patients, microangiopathy was not relatively small size of the male cohort.

Disclosure of Interests: None declared.

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