morphology and function of the microcirculation with different non-invasive techniques such as nailfold videocapillaroscopy (NVC). NVC is of paramount importance for the differential diagnosis of primary and secondary Raynaud’s phenomenon [1], and is part of the 2013 ACR/EULAR classification criteria for systemic sclerosis. As there is a wide variety of non-scleroderma patterns, the categorisation of capillaroscopic images as non-scleroderma patterns may be a challenge to the capillaroscopist.

Objectives: This study was designed to propose a simple fast track algorithm to differentiate scleroderma patterns from non-scleroderma patterns and to assess its interobserver reliability.

Methods: During the 8th EULAR course on capillaroscopy held in Genoa, September 2018, a lecture on teaching the fast track algorithm to categorise an image as non-scleroderma (category 1) or scleroderma pattern (category 2) (see figure) was given to all attendees (from 43 different countries): 6 experts, 68 novices, 53 moderately experienced (< 5 years of experience with capillaroscopy) and 14 experienced physicians (> 5 years of experience with capillaroscopy). Immediately after training, an examination was performed on 30 images. Classification of the images was defined by the presenter (VS) as the gold standard. Interobserver reliability was assessed by the calculation of kappa coefficients and proportion of agreement versus the gold standard.

Results: The light kappa was 1 for the independent experts (n=6) and 0.92 for the attended (n=135). When comparing with the gold standard, an equal mean kappa of 0.96 (95%CI 0.95 – 0.98) was found for both independent experts and attendees. Analyses according to the reported level of experience on capillaroscopy revealed a mean index of reliability of 0.98 (95%CI 0.96 – 0.99) for novices, 0.96 (95%CI 0.93 – 0.99) for moderately experienced raters and 0.93 (95%CI 0.85 – 1.01) for experienced raters.

Conclusion: For the first time a fast track algorithm has been developed that was trainable within an hour to non-experienced capillaroscopists and has an excellent reliability to discern a non-scleroderma from a scleroderma pattern by medical doctors with varying levels of expertise in capillaroscopy.

REFERENCE
the clinical utility of the antibody and help deciphering the pathogenesis of this complex disease.

REFERENCE

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SAT0298 DIAGNOSIS OF SYSTEMIC SCLEROSIS: HOW AND WHEN
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Background: Systemic sclerosis (SSc) is a heterogeneous disease regarding its clinical expression, evolution and forms of presentation. In spite of the lack of a disease modifying therapy, there are effective treatment options to control complications such as pulmonary arterial hypertension (PAH), interstitial lung disease (ILD) or digital ulcers (DU). Early diagnosis is crucial and allows the physician to start these treatments as soon as possible. To know how and when we diagnose SSc and its clinical manifestations will help us to detect potential improvement areas.

Objectives: To study the main clinical manifestations that lead to diagnosis of SSc, the delay of the diagnosis after the beginning of the first symptom, and to analyze the role of the different clinical features in the diagnosis.

Methods: A retrospective and descriptive study was conducted, which included patients with SSc from our Rheumatology Department. Clinical data and specific autoantibodies profile (ACA, Scl-70, RNP) were recorded, paying special attention to the clinical manifestations that led to diagnosis. We classified them in eight categories: secondary Raynaud’s phenomenon (SRP), digital ischemia or DU, musculoskeletal symptoms, skin induration, ILD, PAH, specific autoantibodies detection, and others.

The date of starting of Raynaud symptom and the date when the diagnosis was established were registered. Analysis were conducted using STATA.

Results: The sample included 149 patients with SSc, meeting the 2013 ACR/EULAR criteria. RP appeared several years prior to the diagnosis (median of 3 years, IQR 0-8), and typically before the first non-Raynaud symptom. 141 out of 149 patients (94,6%) presented RP prior to the diagnosis. However, SRP was the manifestation that led to diagnosis in only 42/149 patients (41,6%), followed by skin induration (18,1%) and DU (12,7%). Surprisingly, 30/149 patients (20,1%) were diagnosed after the appearance of severe complications such as DU, ILD or PHA. Most patients started symptoms related to SSc several years before diagnosis (details in Table 1). 40/48 patients (83%) that were diagnosed due to SRP, presented abnormalities in nailfold capillaroscopy as well as specific autoantibodies (Table 2). Presenting telangiectasia, calcinosis, ILD or PAH was not associated with an early diagnosis, nor was ACA, Scl-70 or RNP positivity.

Conclusion: An early approach of RP with capillaroscopy and specific autoantibodies would avoid delays to SSc diagnosis, allowing a close follow-up and an early treatment if necessary. SSc must always be considered as a differential diagnosis in patients with DU, ILD or PAH. An adequate referral of patients from primary care physicians to rheumatologists, and a multidisciplinary approach with Vascular Surgery, Pneumology and Cardiology Units would advance the diagnosis of this complex and potentially severe disease.

Table 1.

<table>
<thead>
<tr>
<th>MANIFESTATION</th>
<th>PATIENTS n (%)</th>
<th>YEARS FROM SYMPTOM TO DIAGNOSIS median (IQR)</th>
<th>YEARS FROM RAYNAUD’S PHENOMENON TO DIAGNOSIS median (IQR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raynaud’s</td>
<td>62 (41,6)</td>
<td>3 (1-10)</td>
<td>3 (1-9)</td>
</tr>
<tr>
<td>Phenomenon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin induration</td>
<td>27 (18,1)</td>
<td>1 (0-4)</td>
<td>1 (0-4)</td>
</tr>
<tr>
<td>Digital Ischemia/UD</td>
<td>19 (12,7)</td>
<td>2 (0-12)</td>
<td>2 (0-12)</td>
</tr>
<tr>
<td>Musculoskeletal symptoms</td>
<td>18 (12,1)</td>
<td>3 (0-6)</td>
<td>3.5 (0-6)</td>
</tr>
<tr>
<td>ILD</td>
<td>8 (5.3)</td>
<td>2.5 (1-4)</td>
<td>3 (0-4)</td>
</tr>
<tr>
<td>Specific autoantibodies</td>
<td>6 (4)</td>
<td>5.5 (4-9)</td>
<td>3 (0-9)</td>
</tr>
<tr>
<td>Others</td>
<td>6 (4)</td>
<td>5.5 (0-10)</td>
<td>5.5, (0-10)</td>
</tr>
<tr>
<td>PAH</td>
<td>3 (2)</td>
<td>35 (20-35)</td>
<td>35 (20-35)</td>
</tr>
</tbody>
</table>

DISCLOSURE OF INTERESTS: None declared

SAT0299 PREVALENCE OF PERIPHERAL EOSINOPHILIA AND CLINICAL ASSOCIATIONS IN THAI SYSTEMIC SCLEROSIS PATIENTS
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Background: Eosinophilia has been reported in systemic sclerosis (SSc) and localized scleroderma, so it might be part of the immune response in the pathogenesis of the disease.

Objectives: To determine the prevalence and clinical associations with peripheral eosinophilia in Thai SSc patients.

Methods: A cross-sectional study was conducted among Thai adult SSc patients, followed up at the Scleroderma Clinic, Khon Kaen University, Thailand, between November 1, 2016 and November 30, 2017. We excluded patients who had clinical overlap with other connective tissue disease, coexisting with localized scleroderma, eosinophilic fasciitis, or eosinophilia myalgia syndrome, and other diseases that cause eosinophilia. Peripheral eosinophilia is defined when total eosinophil count (TEC) is greater than 500 cells/mm³. Clinical, laboratory tests for tissue parasite, cytokines, and others for evaluation the cause of eosinophilia were done on the study date.

Results: A total of 185 SSc patients were enrolled. Fifty-seven cases (30.1%) were peripheral eosinophilia of which 21 had the causes of eosinophilia identified by laboratory without clinical symptoms (viz., 9 adrenal insufficiency, 2 tuberculosis, and 10 parasitic infection). The total prevalence of the unknown causes of peripheral eosinophilia in SSc was 21.9% (95%CI 15.9-29.1) (36 of 164 cases). Five of the patients had TEC above 1500 cells/mm³. Of the 164 SSc patients, the majority (70.6%) had diffuse cutaneous SSc, and the female to male ratio was 2.3:1. The respective median age and median duration of the disease was 57.0 years (IQR 52.2-63.9) and 6.5 years (IQR 2.9-10.5). According to a multivariate analysis, being male and duration of disease increasing...