Raynaud's phenomenon, current use of losartan and correlated with BAI scores. Also, a longitudinal study showed a reduction in volume of the hippocampus subfields volumes when compared to patient's baseline associated with calcinosis and current use of prednisone.

REFERENCES:

- [1] Eichenbaum, Howard. "A cortical-hippocampal system for declarative memory." *Nature Reviews Neuroscience* 1.1 (2000): 41-50.
- [2] Manjon JV, Coupe P (2016) volBrain: an online MRI brain volumetry system. *Front Neuroinform* 10:30.

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AB0458

SURVIVAL OF SCLERODERMA PATIENTS WITH INTERSTITIAL LUNG DISEASE: OBSERVATION DATA FROM A MALAYSIAN TERTIARY CENTRE

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Background: Interstitial lung disease (ILD) is the leading cause of death in scleroderma (SSc) with decline in FVC as a predictor of mortality in patients with SSc-ILD, especially in the early course of the disease.

Objectives: The aim of this study is to determine the survival rate of SSc-ILD in a Malaysian cohort of patients from University Malaya Medical Centre (UMMC).

Methods: 61 patients clinically diagnosed with SSc-ILD were identified and prospectively recruited. Baseline demographic data were collected. Kaplan-Meier analysis was used to estimate the survival.

Results: Females were predominant (56, 91.8%). 39 (64%) had limited cutaneous SSc. Majority were ethnicity Chinese 30 (49.2%), followed by Malays 20 (32.8%), Indians 7 (11.4%) and others 4 (6.6%). Mean age was 56.25 (SD $\pm$ 12.5) years while mean duration of disease (non-Raynaud's disease onset) was 10.5 years (SD $\pm$ 9.2) (range of 1 year to 44 years) years. 29 (47.5%) patients were positive for anti-Scl-70, whereas 6 (9.8%) patients were anti-centromere positive. There were 16 (26.2%) deaths. Median survival was 24 years. Patients had a sharper drop in survival probability for the first 10 years compared to the next 20 years (Figure 1). Median survival in limited subset was 24 years whereas in diffuse subset was 11 years. Patients from the limited subset appeared to have higher chance of surviving for 10 years and above, compared to those in the diffuse subset (Figure 2).

Conclusion: The results demonstrate the poor survival in SSc-ILD patients. The survival rate tends to be worse in the first 10 years of SSc disease duration. Survival rate was poorer in patients with diffuse cutaneous subset.

REFERENCES:

- [1] Parelak A et al. *Lancet Resp Med* 2020
- [2] Goh NS et al. *Am J Respir Crit Care Med* 2008

Figure 1

Figure 2

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AB0459

ARTICULAR INVOLVEMENT IN PATIENTS WITH SYSTEMIC SCLEROSIS

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Background: SSc (systemic sclerosis) is a connective tissue disease characterized by small vessel vasculopathy, production of autoantibodies, and fibroblast dysfunction leading to increased deposition of extracellular matrix in the skin and

internal organs mainly. Therewithal, many SSc patients develop musculoskeletal symptoms during the course of their illness. Different rheumatic complaints such as arthralgia, arthritis, contractures, tendon friction rubs, calcinosis, and acroost-eolysis can be seen as musculoskeletal symptoms in SSc patients [1].

Objectives: To provide an overview of the spectrum of articular involvement in SSc and determine the relationship between these involvements and Rheumatoid factor (RF) and Anti-cyclic citrullinated peptide (Anti-CCP) positivity and organ involvements.

Methods: We performed a retrospective cohort study involving 232 SSc patients who were followed up in our department of rheumatology between 2000 and 2020 years. The patients were divided into two groups as limited and diffuse SSc. Age, gender, weight, height, smoking habits, duration of illness, follow-up duration, other systemic organ involvement, and radiographic findings were recorded. Diagnostic tests such as RF, Anti-CCP, ANA, ENA panel tests, direct radiographs were examined.

Results: The mean age of the patients was 59.9 $\pm$ 12.8 and 88.4% of them were women. 69.3% of patients were limited SSc. At any stage of the disease, 39.1% of all patients had arthralgia and 34.1% had arthritis. The arthritis rate was similar between the SSc groups ($p = 0.396$). RF and anti-CCP positivity rates were similar between the SSc groups. Although RF and anti-CCP positivity rates were higher in the patient group with arthritis, it was not statistically significant (respectively $p=0.563$, $p=0.072$). Interestingly, the lung involvement rate was higher in patients with arthritis (63.3% versus 46.4%) ($p=0.015$). Other clinical, demographic characteristics, laboratory, and radiographic findings of the patients are shown in Table 1.

Conclusion: Articular involvement in SSc is a common clinical feature seen in one-third of patients regardless of the type of disease. Although RF and Anti-CCP positivity are more common in patients with arthritis, it was not statistically significant. Interestingly, arthritis is a more common manifestation in patients with lung involvement.

REFERENCES:

- [1] R. D. Sandler, M. Matucci-Cerinic, and M. Hughes, "Musculoskeletal hand involvement in systemic sclerosis," *Seminars in Arthritis and Rheumatism*, vol. 50, no. 2. 2020, doi: 10.1016/j.semarthrit.2019.11.003.

Table 1. Demographic and clinical characteristics of b/tsDMARDs patients

	Limited SSc	Diffuse SSc	All patients	P
Table-1	(n=161)	(n=71)	(n=232)	
Age (years) (Mean $\pm$ SD)	60.5 $\pm$ 12.7	58.6 $\pm$ 12.9	59.9 $\pm$ 12.8	0.295
Disease duration (years) (Mean $\pm$ SD)	11.5 $\pm$ 6.6	12.4 $\pm$ 8.1	11.8 $\pm$ 7.1	0.384
Weight (kg) (Mean $\pm$ SD)	68.2 $\pm$ 13.3	66.2 $\pm$ 15.6	67.6 $\pm$ 14.1	0.331
BMI (kg/m ²) (Mean $\pm$ SD)	27.6 $\pm$ 5.5	26.2 $\pm$ 6.1	27.1 $\pm$ 5.7	0.102
Female, n (%)	146 (90.7)	59 (83.1)	205 (88.4)	0.097
Current and ex smoker, n (%)	60 (37.2)	18 (25.4)	78 (33.6)	0.077
Digital ulcer, n (%)	53 (32.9)	34 (47.9)	87 (37.5)	0.003*
Contracture on hand	28 (17.4)	28 (39.4)	56 (24.1)	<0.001*
Arthralgia, n (%)	63 (39.1)	29 (31.5)	92 (39.7)	0.806
Arthritis, n (%)	52 (32.3)	27 (38)	79 (34.1)	0.396
Joint space narrowing on X-ray, n (%)	44 (51.2)	30 (63.8)	74 (55.6)	0.160
Joint erosion on X-ray, n (%)	17 (19.8)	14 (29.8)	31 (23.3)	0.205
Acroostolysis on X-ray, n (%)	9 (10.5)	16 (34)	25 (18.8)	0.001*
ANA positivity, n (%)	155 (96.3)	69 (97.2)	224 (96.6)	0.728
Anti-Scl positivity, n (%)	41 (28.7)	48 (71.6)	89 (42.4)	<0.001*
Anti-centromere positivity, n (%)	65 (45.5)	10 (14.9)	75 (35.7)	<0.001*
RF positivity, n (%)	27 (17.5)	14 (20.6)	41 (18.5)	0.589
Anti-CCP positivity, n (%)	16 (12.7)	7 (11.3)	23 (12.2)	0.782

P*Independent Samples t Test, Pearson Chi-Square Test, BMI; Body mass index, ANA; Anti nuclear antibody, RF; Rheumatoid factor, Anti-CCP; Anti- Cyclic citrullinated peptide

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AB0460

THE UTILITY OF USB CAPILLAROSCOPE FOR ASSESSMENT OF RAYNAUD'S PHENOMENON PATIENTS

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Background: Videocapillaroscopy is the gold standard for evaluation of nailfold capillaries and the major tool used for differentiation of primary and secondary Raynaud's phenomenon (RP) in rheumatology practice. However, nowadays, there are also accessible alternatives such as USB capillaroscopes, which offer the opportunity to apply capillaroscopic examination at a significantly lower price.

Objectives: The aim of the current study was to study the utility of USB capillaroscope (Dinolite) via assessment of capillaroscopic images obtained by patients with primary and secondary RP in rheumatic diseases.