layer (GC-IPL), vessel density (VD), perfusion density (PD), optic disc PD, reflux index and foveal avascular zone (FAZ) parameters were measured by the same experienced operator.

Results: There was no significant difference between SSc and controls in terms of age, sex, spherical equivalent (SE), intra ocular pressure (IOP), and axial length (AL). Central and mean macular thickness, nasal and inferior RNFL thicknesses were significantly thinner in SSc patients (Table). Additionally GC complex thicknesses were significantly thinner in all quadrants compared to controls.

Central vessel density (CVD) and central perfusion density (CPD) values were found significantly decreased in all regions in patients with SSc. Optic disc perfusion density values were also decreased in SSc group. An inverse correlation was found between central macular thickness, FAZ area and perimeter values (ρ : -0.300, p : 0.007; ρ : -0.276, p : 0.013, respectively). There was no relationship between the disease duration and the OCTA measures.

Conclusion: Vascular and perfusion density were found decreased in patient with SSc at the results of OCTA measures. These findings may help to understand vasculopathy in the pathogenesis of the disease and OCTA may be a new method providing objective and non-invasive information about capillary network in SSc.

Table. Demographic and ocular parameters of study population

Parameters	SSc (n = 40)	Control (n = 40)	p
Age, years; mean (SD)	47.2 (8.6)	47.5 (8.1)	0.631
Male sex, n (%)	24(60)	16 (40)	0.087
Disease duration, months; mean (SD)	81.3 (38.0)	N/A	-
Foveal MT(μ)	246.3 $\pm$ 19.4	252.6 $\pm$ 15.3	0.033
Average MT(μ)	280.8 $\pm$ 12.4	286.5 $\pm$ 8.7	0.008
Vessel density (mm ⁻¹), 6mm total area; mean (SD)	17.60 $\pm$ 1.31	18.66 $\pm$ 0.64	0.006
Perfusion density, 6mm total area; mean (SD)	43.25 $\pm$ 3.32	45.94 $\pm$ 1.52	0.002
Circularity index; mean (SD)	0.72 $\pm$ 0.09	0.73 $\pm$ 0.06	0.049
RNFL nasal (μ); mean (SD)	74.37 $\pm$ 12.36	74.05 $\pm$ 8.48	0.011
RNFL inferior (μ); mean (SD)	122.62 $\pm$ 17.87	127.40 $\pm$ 12.63	0.023
Inferior nasal GCC(μ); mean (SD)	85.72 $\pm$ 8.53	85.82 $\pm$ 4.84	0.001
Inferior temporal GCC(μ); mean (SD)	82.70 $\pm$ 8.62	84.95 $\pm$ 4.15	0.001
Superior nasal GCC(μ); mean (SD)	86.35 $\pm$ 7.73	86.8 $\pm$ 5.70	0.012
Superior temporal GCC(μ); mean (SD)	47.2 (8.6)	47.5 (8.1)	0.631

MT: Macular thickness; RNFL: Retinal nerve fiber layer; GCC: Ganglion cell complex

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AB0545

GASTROINTESTINAL INVOLVEMENT IN SYSTEMIC SCLEROSIS

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Background: Systemic sclerosis (SSc) is a chronic, connective tissue disease with an autoimmune pattern characterized by inflammation, fibrosis and microcirculation changes leading to internal organs malfunctions. The gastrointestinal tract (GIT) is affected in up to 90% of patients with SSc. Any part of the GIT from the mouth to the anus can be affected. There are few descriptive studies about SSc-related GIT involvement.

Objectives: We aimed to characterize the GIT involvement in patients with SSc.

Methods: This retrospective study included all patients from SSc cohort of our autoimmune diseases unit in a tertiary referral centre. All patients fulfilled SSc criteria proposed by the American College of Rheumatology. All subjects' histories were evaluated. Laboratory and imaging results were obtained from the hospital files. Patients with digestive manifestations were compared with patients without GIT involvement. Chi2 and t-student were used, using the statistical package SPSS25.0.

Results: 83 subjects with SSc were included, 68 (81,9%) of them were women. The mean age at the onset of SSc was 62,1 $\pm$ 15,3 years (range 26-89) with a mean follow-up of 9,6 $\pm$ 7,4 years. 80,7% of patients had limited SSc, 12% diffuse SSc, 4,8% SSc sine scleroderma and 2,4% early SSc. Considering the immunological profile 12 (14,5%) had Scl70 antibodies, 49 (59%) antinuclear and 21 (25,3%) had ANA antibodies without specificity for anti-Scl70 or antinuclear. 37,3% patients had lung involvement, 20,5% scleroderma and 30,1% digital ulcers. 79,5% of SSc patients were treated with proton pump inhibitors or H2 blockers. 53 (63,9%) patients with SSc had GIT involvement.

In 11 patients (20,7%) digestive involvement was diagnosed before SSc (mean 26,2 months). Esophageal involvement occurred in 83%, gastric involvement in 28,3%, intestine involvement in 24,5% and liver and biliary tree involvement in 26,4%. See table 1. No significant differences in age, sex, SSc subtype, autoantibody profile, lung involvement, skin disease, mortality and therapy were observed between patients with or without GIT manifestations. There were no deaths associated with GIT involvement. The most common pharmacologic therapy used was proton pump inhibitors (86,8%), domperidone (20,8%) and antibiotic rotation (17%).

Esophageal	Gastric	Intestinal	Liver and biliary tree
44/53 (83%) Esophageal motility disorder 8 (15,1%)	15/53 (28,3%) Gastroparesis 6 (11,3%)	12/53 (24,5%) Small bacterial overgrowth 7 (13,2%)	14/53 (26,4%) Primary biliary cholangitis 9 (17%)
Gastroesophageal reflux 40 (75,5%)	Abdominal pain / nausea 10 (18,9%)	Colonic inertia 1 (1,9%)	Autoimmune hepatitis 3 (5,7%)
Dysphagia 11 (20,8%)	Subacute gastritis 7 (13,2%)	Diarrhea 6 (11,3%)	Cholestatic liver enzymes 11 (20,8%)
		Flatulence / abdominal discomfort 6 (11,3%)	Cirrhosis 2 (3,8%)

Conclusion: Almost two thirds of our cohort of SSc have symptomatic gastrointestinal disease. GIT manifestations are heterogeneous. Symptoms are non-specific and overlapping for a particular anatomical site. Esophagus is the most commonly affected. More than seventy-five per cent of patients experience symptoms of gastroesophageal reflux. We did not find differences among patients with and without SSc GIT disease. 17% of patients had a Reynold's syndrome.

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AB0546

IMMEDIATE TO INTERMEDIATE EFFICACY AND SAFETY OF PROSTAGLANDINS E1 (PGE1) INHIBITORS- ALPROSTADIL IN TREATMENT OF SYMPTOMATIC RAYNAUD'S IN SYSTEMIC SCLEROSIS; SINGLE TERTIARY RHEUMATOLOGY CENTRE EXPERIENCE FROM SRI LANKA

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Background: Systemic sclerosis (SSc) is a multi-system connective tissue disease¹. Raynaud phenomenon (RP) is a frequent (>90%) manifestation in SSc² & if untreated could lead to complications such as digital ulcers, gangrene and amputation.

Calcium antagonists are considered as first-line therapy for symptomatic SSc-RP. In refractory cases phosphodiesterase type 5 (PDE-5) inhibitors- Sildenafil and PGI2 analogue- Iloprost are used. A meta-analysis of trials indicate that PDE-5 inhibitors reduce the frequency and severity of SSc-RP attacks.

In addition a study done with PGE1 inhibitors- Alprostadil 60 micrograms infusion given for six consecutive days, had shown immediate efficacy in SSc- RP; as demonstrated by increased blood flow, digitally measured by telethermography. Furthermore there was a reduction of the number, frequency and severity of attacks³.

Due to unavailability of Iloprost in Sri Lanka, based on the above evidence some rheumatology centres use Alprostadil 60 microgram infusion for 3 consecutive days in refractory symptomatic SSc-RP.

Objectives: To assess immediate (Day 4) and intermediate (Day 42) efficacy of Alprostadil 60 microgram infusions given for 3 consecutive days in treating SSc-RP.

Methods: An observational longitudinal study was conducted at the Rheumatology unit, Teaching Hospital Anuradhapura- Sri Lanka during 01.09.2019- 30.12.2019. Twelve diagnosed Systemic Sclerosis patients with symptomatic Raynaud's (Raynaud's score of >5) despite receiving maximum tolerable doses of calcium antagonists consisted of the study sample.

Pre and post (on day 4 and 42) treatment frequency of Raynaud's attacks and Raynaud's score was recorded using a pre-tested interviewer administered questionnaire. Statistical analysis was done using SPSS version 22 with Wilcoxon Signed Rank test at 5% significance level.

Results: All recruits were females (n=12). Median (IQR) age of the study population and disease-duration were 45 (40 to 53.5) years and 6 (2.8 to 9.5) years respectively. Among participants, 58.3% and 25% had previous or current digital ulcers and gangrene respectively.

Table 1. Pre and post treatment mean frequency of attacks and mean Raynaud's score

	Pre treatment median (IQR)	Post treatment Day 4 median (IQR) and significance of the difference between the pre-treatment values	Post treatment Day 42 median (IQR) and significance of the difference between the pre-treatment values
Mean frequency of Raynaud's attacks/ past 24hrs	4.0 (2.3 to 5.0)	0.0 (0.0 to 1.0) P<0.05*	2.0 (0.3 to 3.8) P<0.05*
Mean duration of attack/24hrs	21.3 (1.1 to 32.5)	0.5 (0.5 to 3.0) P<0.05*	7.5 (3.0 to 25.0) P>0.05
Mean Raynaud's score	6.5 (5.0 to 8.8)	2.0 (0.3 to 2.8) P<0.05*	3.0 (0.1 to 5.0) P<0.05*

*statistically significant

Conclusion: Alprostadil 60 microgram infusions demonstrated a statistically significant immediate and intermediate efficacy in treating symptomatic SSc- RP with reduction of frequency of Raynaud's attacks and Raynaud's score at both. Only immediate efficacy was seen for mean duration of attacks. Based on these and the observed satisfactory safety level, we recommend the use of Alprostadil for symptomatic Raynaud's in SSc-RP as an alternative to Iloprost. Further studies of larger samples are recommended.

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AB0547

INVESTIGATION OF THE PRESENCE OF FIBROMYALGIA SYNDROME IN PATIENTS WITH SCLERODERMA

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Background: As with other connective tissue diseases, fibromyalgia (FMS) syndrome is not uncommon in scleroderma. However, there is no clear information about it in the literature. According to 1990 ACR criteria, sensitive point evaluation was made in scleroderma and FMS frequency was reported as 18.6% in scleroderma patients. However, it is known that fibrosis creates difficulties in sensitive point determination. moreover, ACR 1990 criteria cannot be met in approximately 25% of fibromyalgia patients. Therefore, the frequency of fibromyalgia in scleroderma patients is unclear. In 1990, ACR announced new criteria in 2010 due to the low sensitivity of ACR criteria to FMS detection and not being used in the follow-up of the disease. In the new set of criteria, not the 18 sensitive point evaluations, but the Widespread Pain Index and Symptom Severity Scale are evaluated.

Objectives: In this study, we planned to investigate the frequency of fibromyalgia in systemic sclerosis patients according to the new ACR criteria defined in 2010.

Methods: 43 patients with diffuse systemic sclerosis with no known additional diseases were included in the study. Patients were evaluated with the new fibromyalgia diagnostic criteria set. Patients were evaluated with Fibromyalgia Impact Questionnaire (FIQ), Pain Location Score (PLS), Symptom Impact Questionnaire (SEA), Widespread Pain Index (WPI) and Symptom Severity Scale (SSS).

Results: The mean age of the patients was 53.45 ± 12.87 years (39 women, 4 men). Mean values were FIQ: 46.05 ± 17.44, PLS:18.32 ± 9.87, SEA: 20.76 ± 11.31, WPI: 7.93 ± 5.87, SSS: 6.51 ± 3.41 respectively. According to these results, 62.8% (n: 27) FMS presence of SS patients was detected.

Conclusion: In the literature, there are only a few studies evaluating the frequency of FMS in scleroderma patients. Malcarne et al. reported that 18.6% of 102 SSc patients met the 1990 classification criteria for FMS. However, there are predominantly early-stage systemic sclerosis patients in this study and the patient group is heterogeneous. We included patients with diffuse systemic sclerosis and widespread skin involvement in this study. we found a much higher frequency of fibromyalgia syndrome than indicated in the literature. Considering that systemic sclerosis is a serious disease that significantly impairs quality of life, this finding is very important. In order to relieve the symptoms associated with FMS, it is important to provide them with additional medical support, to provide as much exercise as possible, and to provide group therapies to improve patients' quality of life.

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