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AB0662 **UTILITY OF NAILFOLD CAPILLAROSCOPY FOR THE EARLY DIAGNOSIS OF SYSTEMIC SCLEROSIS SPECTRUM OF DISEASES IN ASIA**

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Background: The utility of nailfold capillaroscopy (NFC) has largely been evaluated in patients with Raynaud's Phenomenon (RP). However, in equatorial countries, RP occurs in only 79% (1) and 84% (2) of patients in Singapore and Malaysia respectively. In the early stages of Systemic Sclerosis (SSc), patients may develop autoantibodies or puffy fingers before the onset of RP (3).

Objectives: There is no data on the utility of NFC in patients with non-RP features suggestive of the scleroderma-spectrum of diseases (SSc, mixed connective tissues disease, dermatomyositis). We aim to compare the utility of NFC for the early diagnosis of the SSc-spectrum of diseases in patients who present with and without RP.

Methods: Patients referred to our institution for NFC evaluation from March 2010 – March 2017 were recruited. Patients with confirmed diagnosis of a connective tissue disease were excluded. Eligible patients were divided into 4 groups: (I) RP with or without positive ANA; (II) Undifferentiated non-RP features to suggest SSc-spectrum diseases and negative ANA; (III) Undifferentiated non-RP features to suggest SSc-spectrum diseases and positive ANA $\geq 1/400$ and (IV) Positive SSc-associated autoantibodies without features to suggest SSc-spectrum diseases. Images were analysed at 200x magnification using a software analysis program. Patients were noted to have normal, aspecific or SSc pattern on NFC, defined by the presence of ≥ 1 giant capillary, avascular areas or >2 dilated capillaries with areas of hemorrhage.

Results: 133 patients were recruited (mean age 55 years, 87% female; 76% Chinese, 7% Malay, 10% Indian, 7% other ethnicity). ANA was positive in 74 (82.2%) patients (n=25 anti-centromere, n=3 anti-Scl70). Taking into consideration NFC patterns, the clinical outcomes were normal in 32 patients (35.6%), connective tissue disease (CTD) suspected in 33 patients (36.7%), and definite CTD in 25 patients (27.8%). Diagnostic yield for SSc-spectrum of diseases was highest in Groups I and III (Table 1).

Abstract AB0662 Table 1.

	Definite SSc-spectrum diseases n (%)	Suspected CTD n (%)	No CTD n (%)
Group I	24 (47.1%)	16 (31.4%)	11 (21.6%)
Group II	5 (31.2%)	5 (31.2%)	6 (37.5%)
Group III	14 (35.9%)	17 (43.6%)	8 (20.5%)
Group IV	2 (12.5%)	9 (56.2%)	5 (31.2%)

Conclusion: In patients without RP, NFC was most useful to confirm a diagnosis in those with undifferentiated features to suggest SSc-spectrum of diseases and positive ANA.

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AB0663 **ASSESSMENT OF HEALTH RELATED QUALITY OF LIFE AND FUNCTIONAL DISABILITY AMONG SCLERODERMA PATIENTS IN BANGLADESH**

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Background: Systemic sclerosis (SSc) is a complex autoimmune disorder that is characterized by overproduction and deposition of collagen in the skin and visceral organs, abnormalities of the microcirculation, and autoimmunity. SSc is responsible for skin, tendon, joint, and vessel damage, which leads to disability, handicap, and worsening of quality of life.

Objectives: The objective of the study was to assess the relationship between health-related quality of life (HRQoL) and functional disability among scleroderma (Systemic sclerosis, SSc) patients.

Methods: A cross-sectional study was conducted among 78 patients in Scleroderma clinic of BSM Medical University (BSMMU). Patients were selected according to American College of Rheumatology/European League Rheumatism (ACR/EULAR) classification criteria for SSc. The validated Bengali version of the Short Form 36 (SF-36) and Health Assessment Questionnaire (HAQ) were used to assess the HRQoL and functional disability respectively.

Results: The mean age of the patients was 36.47

11.28 years and most of them were female (91.0%). Majority of the patients (76.9%) had diffuse whereas 23.1% patients had limited SSc. Out of 78 patients, antibody profiles were available for 63 patients. The frequency of Antinuclear, Anti-topoisomerase and Anticentromere antibody were 58.7%, 38.1%, 3.2% respectively. Sclerodactyly was present in 84.6% patients and 78.2% had pinch nose and 60.3% had calcinosis. Pitting scars of finger tips was present in 67.9% patients. Raynaud's Phenomenon was present in 89.7% patients and Musculoskeletal manifestations was present in 47.4% patients. Among the patients, 78.2% patients had microstomia and 60.3% had esophageal involvement. The mean MRSS was 21.39 $\pm$ 13.02. SF-36 score showed that the mean Physical Component Summary (PCS) and Mental Component Summary (MCS) were 35.65 $\pm$ 23.65 and 41.36 $\pm$ 25.94 respectively. The mean HAQ-DI was found 1.40 $\pm$ 0.95. The PCS of the SF-36 was moderately correlated with the HAQ-DI ($r=0.641$, $p<0.001$) and the MCS of the SF-36 was weakly correlated with the HAQ-DI ($r=0.360$, $p<0.001$) (Spearman's Correlation).

Conclusion: Functional disability significantly affects health related quality of life. Treatment strategies should include multi-disciplinary approach such as physiotherapy, psychotherapy, social support and occupational therapy to reduce the functional disability which will further enhance the HRQoL of SSc patients.

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