The relationship between digital ulcers and severity of lung function test in systemic sclerosis over a five-year period

O. B. Ovsyannikova, O. Koneva, L. Ananieva, Department Of Vascular Pathology, Nasonova Research Institute of Rheumatology, Moscow, Russian Federation

Background: Systemic sclerosis-related interstitial lung disease (SSc-ILD) is the leading cause of death in SSc. Predictors of the outcomes of ILD in SSc are under investigation.

Objectives: To assess association of the digital ulcers with dynamics of forced vital capacity (FVC) and diffusing capacity for carbon monoxide (DLco) in patients with SSc-ILD.

Methods: It was a longitudinal study involving 83 pts with SSc-ILD (mean age 46±13.4; 69% have limited subset of the disease; 95% were female). The mean duration of follow up was 58.9±12.0 months. At the end of the study a number of pts with digital ulcers (DUs) was 29 (35%). Additionally 77 pts with SSc-ILD were investigated with HRCT and were divided into 3 groups: The 1st group (16 pts) with improvement; 2nd group (39 pts) without any changes and 3rd group (22 pts) with worsening of fibrosis.

Results: After 5 years of follow up FVC increased significantly in all pts without DUs (n=54) from 88.5±19 to 96.2±23 (p<0.05); in group 1 from 92.0±20 to 106.1±19 (p<0.05); in group 2 from 87.1±18 to 94.3±23.5 (p<0.05) and only in group 3 FVC was stable (88±22 and 87±24.5) (p>0.05). The mean value of FVC in all pts with DUs didn’t change (88±14 and 86±16, p>0.05) with tendency to decreasing in group 3 (from 83.1±12.5 to 74.3±13 (p<0.05).

After 5 years of follow up DLco declined significantly in all pts with or without DUs; however in the 1 st group decline of DLco wasn’t significant. The decreasing of DLco was more prominent in group 3 than in group 2. Therefore, in group 2 patient without DU (n=24) – from 65±16 to 60±11 (p>0.05) and in patients with DU (n=14) DLco changed from 61±15 to 57±14 (p>0.05). In 3rd group in pts without DUs (n=60) decrease of DLco was from 55±15 to 48±15 (p>0.05) and in patients with DU (n=9) from 50±12 to 44.5±15 (p<0.05).

Conclusions: In patients without DUs significant increasing of FVC during 5 years long follow up was observed. The worsening of fibrosis on HRCT in pts with DUs was associated with the lowest value of FVC and DLco at the entry and at the end of the study.

Disclosure of Interest: None declared


The onset, clinical course and outcomes of SSc-overlap with PM/DMD or RA (SSc-PMD/DM and SSc-RA)

O. Desinovitch, M. Starovoytov, L. Ananieva, Institute of Rheumatology, Moscow, Russian Federation

Background: Systemic sclerosis (SSc) concurrent with other connective tissue diseases (poly/dermatomyositis, rheumatoid arthritis and others) seem to be still underexplored clinical forms of SSc.

Objectives: To study specific features of the onset, clinical course and outcomes of systemic scleroderma-poly/dermatomyositis (SSc-PMD/DM) and SSc-RA overlap syndromes.

Methods: Totally 115 patients were examined, 75 – with SSc-PMD/DM and 40 with SSc-RA, among them 98 women and 17 men aged 17–74 years (mean age 44±14.5) and disease duration from 6 months to 35 years (median 82–8).

Results: In 18% of overlapping SSc pts the disease manifested with isolated Raynaud’s syndrome (RS) at the onset, in 61% – RS came in combination with cutaneous and/or joint and muscle pathology, and in remaining 7% and 2% over- lapsing SSc manifested with the isolated articular syndrome or muscular involvement (proximal weakness), respectively. During the first 3 years SSc generalisation with emerging signs of PM/DM occurred in 61% of patients, erosive arthritis manifested in 51%; and in 20% of pts arthritis was detected later. Limited skin involvement predominated, while diffuse skin lesions were present in 23% of SSc-PMD/DM cases, 1/3 of them showed signs of DM. All pts with overlapping SSc syndrome received a glucocorticoids (GCs)-based combination therapy (SSc- PM/DM 30–60 mg/day, SSc-RA –10–20 mg/day), with NSAIAs and vascular drugs, 74% were administered cytotoxic agents, more often methotrexate (48%) and 7% – antifibrinolytic drugs. Two types of overlapping SSc evolution patterns were identified: type I is favourable (stabilisation and slow progression without significant disease activity, and preserved work capacity); type II is unfavourable (continuing activity, rapid progression, disability and deaths). Favourable overlapping