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CLINICAL AND ORGAN INVOLVEMENT CHARACTERISTICS IN SYSTEMIC SCLEROSIS

Muhammadiyeva S.M., Khudaynazarov A.A., Shiranova Sh.A.
Tashkent State Medical University, Tashkent, Republic of Uzbekistan

Background. Systemic sclerosis (SSc) is an autoimmune connective tissue disease characterised by skin fibrosis, microcirculatory disturbances, Raynaud's phenomenon, and internal organ involvement. The clinical course is heterogeneous, and damage to the lungs, heart, oesophagus, kidneys, and vessels directly influences patient prognosis. Comprehensive assessment of organ involvement is therefore essential for early diagnosis and individualised treatment planning.

Objective. To evaluate the frequency of clinical manifestations, major organ involvement, vascular complications, and comorbid conditions in patients with systemic sclerosis.

Materials and Methods. A retrospective analysis of medical records of 19 patients with SSc and overlap syndrome treated in the cardiorheumatology department during 2024–2025 was performed. Age, sex, disease course, activity level, Raynaud's phenomenon, skin, joint, cardiac, pulmonary, oesophageal, renal, and vascular involvement, as well as key laboratory and instrumental findings were assessed.

Results. Mean patient age was 46.1 ± 9.1 years; women constituted 89.5% (n=17) and men 10.5% (n=2). Disease activity grade II was recorded in all patients. A subacute course was identified in 78.9% (n=15) and a chronic course in 21.1% (n=4). Raynaud's phenomenon and vascular involvement were present in all patients. Skin and joint involvement was found in nearly all cases. Oesophageal involvement was detected in 84.2% (n=16), pulmonary involvement in 57.9% (n=11), and renal involvement in 57.9% (n=11). Despite frequent documentation of cardiac involvement in diagnosis formulations, left ventricular systolic function was preserved in the majority of patients on echocardiography, with a mean ejection fraction of $65.8 \pm 2.8\%$. Critical digital ischaemia was recorded in 10.5% (n=2), symptomatic arterial hypertension in 63.2% (n=12), and glucocorticoid dependence in 42.1% (n=8). Overlap syndrome was identified in 21.1% (n=4), occurring alongside rheumatoid arthritis, dermatomyositis, and systemic lupus erythematosus.

Conclusions. Systemic sclerosis follows a multi-organ course in the studied cohort. Raynaud's phenomenon, skin, joint, and vascular involvement represent the leading clinical features, while oesophageal, pulmonary, and renal involvement also occur at high frequency. The presence of arterial hypertension, glucocorticoid dependence, overlap syndromes, and vascular complications underlines the necessity of comprehensive patient evaluation in systemic sclerosis.

Keywords: *systemic sclerosis, Raynaud's phenomenon, organ involvement, overlap syndrome, arterial hypertension.*

