

## 7. COVID-19 INFECTION AND THE ONSET OF SYSTEMIC SCLERODERMA

**Author:** Moroza Olga

**Co-author:** Stolarencu Ana, Lungu Tatiana

**Scientific adviser:** Nistor Alesea, MD, Assistant Professor, Department of Internal Medicine Rheumatology and Nephrology, Nicolae Testemtanu State University of Medicine and Pharmacy, Chisinau, Republic of Moldova.

**Introduction.** Covid-19 disease is a respiratory tract infection caused by the new SARS-CoV-2 virus, which in the last 2 years has affected almost 500 million people globally. The danger of infection consists of the virus's target which is systems and organs already involved in chronic diseases. COVID-19 has also been demonstrated to induce autoantibody production in genetically predisposed patients and may cause the onset or exacerbation of autoimmune diseases.

**Case presentation.** A 55-year-old patient presented to the "Timofei Moșneaga" Republican Clinical Hospital with dyspnea, dysphagia, headache, arthralgia, and myalgia. From her medical history, she was presented in January 2021 with Raynaud syndrome and a month later suffered from SARS-CoV-2, which was the trigger for the activation of anti-Scl 70 Ac, thus establishing the diagnosis of Systemic Skin Scleroderma (SSc). At the physical examination were observed the areas of edema and induration in the upper and lower limbs, microtomy, telangiectasia on the anterior part of the thorax, Raynaud syndrome, areas of hypo-/hyperpigmentation of the hands, feet, and chest, hematological and autoimmune changes. Chest CT scan detected interstitial pneumonia with pronounced pericardial effusion. In November 2021, the pericardial cavity was drained due to cardiovascular complications, from which 900 ml of sero-hemorrhagic fluid was aspirated.

**Discussion.** This case report describes the onset of clinical symptoms of SSc with anti-Scl 70 positive Ac after Covid-19 in a patient with a history of Raynaud syndrome. Covid-19 and SSc are known to have some similarities, such as elevated levels of IL-6, IL-10, and MCP-1, endothelial damage, and interstitial pulmonary fibrosis. However, in the case of the patient, the presence of anti-Scl70 Ac confirms the diagnosis of SSc. We can also assume that the patient has a genetic predisposition to autoimmune diseases, and Covid-19 infection triggered the activation of anti-Scl 70 Ac.

**Conclusion.** In conclusion, we want to specify the need to perform the immunological examination, in the detection of autoantibodies in patients with unclear symptoms, who underwent Covid-19.