ANTI-FIBRILLARIN ANTIBODIES AS A MARKER OF DISEASE SEVERITY IN SYSTEMIC SCLEROSIS.

Zaripov S.I
Abdurakhmanova N.M
Tashkent State Medical University, Tashkent, Uzbekistan

Systemic sclerosis (SSc) is a heterogeneous autoimmune connective tissue disease characterized by microvascular dysfunction, immune system dysregulation, and progressive fibrosis of the skin and internal organs.

The clinical course and prognosis vary significantly depending on disease subtype and autoantibody profile.

Among various autoantibodies, anti-fibrillarin antibodies (AFA) are associated with a more severe disease phenotype, particularly in patients with diffuse cutaneous systemic sclerosis (dcSSc).

Understanding the clinical and immunological implications of AFA may improve disease stratification and management strategies.

Aim. To assess the clinical and immunological significance of anti-fibrillarin antibodies in patients with systemic sclerosis, focusing on their association with skin fibrosis and interstitial lung involvement.

Materials and Methods. A total of 60 patients diagnosed with systemic sclerosis between 2021 and 2025 were included in the study.

The cohort consisted of 36 patients (60%) with diffuse cutaneous SSc and 24 patients (40%) with limited cutaneous SSc. Among the dcSSc group, 16 patients were AFA-positive, and 20 were AFA-negative. Clinical evaluation included modified Rodnan skin score (mRSS) to assess skin thickness. High-resolution computed tomography (HRCT) was used to detect basal pulmonary fibrosis. Raynaud's phenomenon and other clinical features were recorded.

Results. The average mRSS was significantly higher in the dcSSc group compared to the lcSSc group (31.2 ± 6.5 vs. 19.3 ± 3.0, $p < 0.001$). Within the diffuse subset, AFA-positive patients exhibited greater skin involvement than AFA-negative individuals (35.7 ± 6.2 vs. 25.4 ± 5.4, $p < 0.05$).

Bilateral basal pulmonary fibrosis was observed in 55.6% of dcSSc patients and was absent in the lcSSc group. Among dcSSc patients, basal fibrosis was more frequent in the AFA-positive subgroup (62.5%) than in AFA-negative patients (40.0%, $p < 0.05$). Raynaud's phenomenon was present in all patients (100%).

Conclusion.

Anti-fibrillarin antibody positivity in systemic sclerosis is associated with more extensive skin fibrosis and a higher prevalence of interstitial lung involvement, particularly in patients with diffuse cutaneous disease.

These findings support the utility of AFA as a prognostic marker and underline the need for early and comprehensive assessment in AFA-positive individuals.

REFERENCES:

1. Zaripov, S. I., & Abdurakhmanova, N. M. B. (2024). The relationship between systemic sclerosis and anti-fibrillarin antibodies. Journal of Modern Educational Achievements, 6(6), 235-238.

2. Абдурахманова, Н. М., Ахмедов, Х. С., & Зарипов, С. И. (2024). ИММУНОПАТОГЕНЕТИЧЕСКОЕ ЗНАЧЕНИЕ АУТОАНТИТЕЛ ПРОТИВ ФИБРИЛЛИНА ПРИ СИСТЕМНОЙ СКЛЕРОДЕРМИИ.

3. Ахмедов, Х. С. (2007). Значение коррекции прогестероновой недостаточности в усилении вторичной профилактики больных системной склеродермией. Врач-аспирант, 17(2), 92-96.

4. Рахматов, А., Жаббаров, О., Қодирова, Ш., Жуманазаров, С., Мирзаева, Г., & Тожибоев, М. С. (2022). Подаграда буйраклар зарарланишининг клиник ва генетик хусусиятлари.

5. Sultonov, P. I., Umarova, Z. F., Jabbarov, O. O., Khodjanova, S. I., Jumanazarov, S. B., Rahmatov, A. M., & Rahimov, I. S. (2023). EFFECT OF ARTIAGREGANT THERAPY ON KIDNEY FUNCTIONAL RESOURCES IN CHRONIC DISEASE. Theoretical aspects in the formation of pedagogical sciences, 2(5), 137-138.