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ASSOCIATION BETWEEN THE DEGREE OF SKIN FIBROSIS AND CLINICAL-LABORATORY INDICATORS IN SYSTEMIC SCLEROSIS

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Introduction

Skin fibrosis is a hallmark of systemic sclerosis and serves as a clinical indicator of disease severity. The modified Rodnan skin score (mRSS) is a validated tool to quantify skin involvement. Correlating skin fibrosis severity with laboratory markers such as erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), and antinuclear antibodies (ANA) can enhance disease monitoring and prognostication.

Keywords: Systemic sclerosis, skin fibrosis, Rodnan skin score, ESR, CRP, ANA

Methodology

A cross-sectional study was performed on 60 patients with systemic sclerosis. Skin thickness was assessed using the mRSS. Laboratory evaluations included ESR (Westergren method), CRP (nephelometry), and ANA detection (immunofluorescence assay). Pearson's correlation was used to determine associations between mRSS and laboratory markers.

Results

Patients with higher mRSS values demonstrated significantly elevated ESR and CRP levels ($p<0.01$). ANA positivity was observed in 100% of the cases, regardless of skin score severity.

Discussion

The correlation between skin fibrosis and inflammatory markers supports the concept that fibrosis in SSc is closely linked to systemic inflammation. ANA positivity reflects the autoimmune nature of the disease but does not differentiate

severity levels. Regular monitoring of mRSS alongside inflammatory markers could improve individualized treatment strategies.

Conclusion

The severity of skin fibrosis is significantly associated with systemic inflammation in systemic sclerosis. Combining clinical skin assessment with laboratory parameters enhances the accuracy of disease monitoring and may guide therapeutic decisions.