

# **A CLINICAL STUDY OF AUTOIMMUNE CONNECTIVE TISSUE DISEASES AND UTILITY OF ANTINUCLEAR ANTIBODY TESTING IN DIAGNOSIS, CLINICAL CORRELATION AND DISEASE MONITORING**

## **Background:**

Antinuclear antibody (ANA) testing plays important role in diagnosis of connective tissue diseases (CTDs). There are only few studies on assessing the disease activity and severity of CTD with the help of ANA testing.

## **Aim:**

The aim is to study the incidence, clinical patterns of CTDs and the utility of ANA testing in clinical correlation, disease activity and prognosis.

## **Methods:**

This is a cross-sectional study of case series done in a prospective manner. 20 patients were recruited in the study during the period from February 2015 to March 2016. ANA titre was done by IIF and ELISA in TVMCH microbiology laboratory and ANA profile by Western blot technique. ANA profile was repeated after six months of initial testing.

## **Results:**

All CTD cases (100%) showed good improvement symptomatically and clinically in response to treatment within two months irrespective of their ANA profile. In repeat ANA profile after six months, antinucleosome antibody positivity increased to 13 cases from 7 cases and the change in ANA profile with respect to antinucleosome antibody was statistically significant ( $P < 0.05$ ).

**Conclusion:**

The reason for the appearance of new positivity in repeat ANA profile, in remission period, is not clearly known due to lack of information in standard literature. Those patients with new positivity should be followed up regularly to monitor disease activity and systemic involvement.

**Keywords:** Antinuclear antibody testing, Antinucleosome antibody, Systemic lupus erythematosus, Systemic sclerosis