

FREQUENCY OF POSITIVE ANTINUCLEAR ANTIBODY IN PEOPLE WITH ACTIVE TUBERCULOSIS AND ITS CHANGES WITH ANTITUBERCULAR THERAPY.

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Background: Antinuclear antibodies (ANAs) are frequently detected in individuals with a variety of conditions, but they are also commonly used in the diagnosis of autoimmune diseases. According to reports, Mycobacterium TB infection is thought to cause the development of autoantibodies, and they often regress following antitubercular therapy. In order to prevent autoimmune diseases from being misdiagnosed, we want to investigate the prevalence of ANA in people with active tuberculosis in our community. **Methods:** The longitudinal study was carried out at BSMMU in Dhaka, Bangladesh, in the Department of Internal Medicine. A total of 150 male and female adult patients with active tuberculosis (age ≥ 18) were recruited from the DMCH, KMSS, and BSMMU DOT corners, as well as the inpatient and outpatient departments. Initially, 150 patients with active tuberculosis had their serum samples taken in order to ascertain the frequency of ANA test results from patients who had not started antitubercular therapy or who had been on anti-TB therapy for fewer than seven days. The patient who had initially tested positive for antinuclear antibody (ANA) was thereafter monitored to see any changes in ANA test results at the end of the third and sixth months of anti-TB therapy. **Results:** Antinuclear antibody was found in 8.7% (13/150) of patients with active tuberculosis; pulmonary TB patients had a higher frequency of ANA positive test results (11.3% (6/53) than extrapulmonary TB patients (7.2%/7/97). The coarse speckled pattern 61.5% (8/13) was the most frequently seen ANA pattern in patients with active tuberculosis. After six months of antitubercular medication, 92.3% (12/13) of the majority of ANA positive patients became negative. There was no significant association found between ANA positivity and clinic demographic characteristics. **Conclusion:** A certain percentage of patients (8.7%) with tuberculosis may have a positive antinuclear antibody. Mycobacterial studies should be performed in patients with positive antinuclear antibodies (ANA) but without the typical or multiple manifestations of autoimmune diseases.

Keywords: Antinuclear Antibody, Active Tuberculosis, Antitubercular Therapy.

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