
THE INVESTIGATION OF ANTI NUCLEAR ANTI BODY (ANA) IN VISCERAL LEISHMANIASIS IN ARDABIL IN 1384-1385

Abstract

Introduction & object: The ANA test is a blood test that is commonly used for evaluating of autoimmune or connective tissue disorders. The ANA test identifies auto antibodies that target the nucleus of cells. The ANA test in women and elderly people, certain medications and chronic infectious diseases may be positive. Visceral leishmaniasis is a chronic infectious diseases with the cellular Immune mechanisms responsible for the control of leishmania infections. This study attempted to investigate the ANA in leishmaniasis, since there was a probability of observing highly positive ANA in this disease.

Subject & methods: In this study, we collected samples of blood of children who were infected by visceral leishmaniasis and the DAT of samples were reported positive (titer 1/800 & higher) through contacting with central laboratory of hygiene center. Then we sent these frozen serums to laboratory to study ANA through ELISA methods. The number of samples was 26 and was collected from three hygienic centers in Ardebil, Meshkin and Germe within 1.5 years. In one sample the DAT of serum was negative, but in the biopsy of bone marrow the leishman's body was reported. The participants were 9 (34.6%) females and 17 (65.4%) males and their ages varied from 5 months to 5 years (mean 21 months). Results assessed by using descriptive and analytic statistics tests.

Results: in the 11 cases (42.3%) the ANA test was positive and in 15 cases (57.7%) was negative. $P=0/000(P<0.01)$ that was significant. The most frequent of positive ANA titers in 2 cases (7.7%) was 14 and the highest titer was 50. ANA in 5 cases of females (55.6%) and in 6 cases of males (35.6%) was positive, $P>0.05$ that wasn't significant.

Discussion: our study indicates that visceral leishmaniasis is a infectious disease witch in the antinuclear antibody(ANA) test can be positive. Presense of positive ANA test in visceral leishmaniasis probably be due to disease pathogenesis and changes in immune system and it's disorders. So false positive anti nuclear antibody (ANA) test in visceral leishmaniasis can be seen.

Key Words: leishmaniasis, ANA, DAT, Kala-Azar, Ardabil