

Frequency and levels of autoantibodies in healthy adult Omanis

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Abstract

Background: A previous pilot study showed a high frequency of anti-smooth muscle autoantibody in Omani blood donors and pregnant women. We conducted this larger-scale study to investigate the frequency and significance of several autoantibodies in healthy individuals from different regions of Oman. METHODS: Sera obtained from 1537 healthy Omanis (1153 males and 384 females), ranging in age from 18 to 57 years, were tested for the presence of ten different autoantibodies using indirect immunofluorescence, haemagglutination and latex agglutination techniques. RESULTS: Low levels of autoantibodies were detected in 33.5%, whereas a few individuals (1.8%) showed high autoantibody titres. Anti-smooth muscle autoantibodies (ASMA) were the most prevalent (11%). Anti-nuclear autoantibodies (ANA) were the second most prevalent (7.6%). Anti-thyroid microsomal autoantibodies (ATMA) and anti-thyroglobulin autoantibodies (ATA) were present in 6.5% and 4.4% of individuals, respectively. The other autoantibodies were detected much less frequently: anti-parietal cells autoantibodies (APCA) were found in 1.6%, anti-brush border antibodies (ABBA) in 1.3%, anti-reticulin autoantibodies (ARA) in 1%, antimitochondrial antibodies (AMA) in 0.8%, antiglomerular basement membrane antibodies (AGBMA) in 0.7% and rheumatoid factor (RF) in 0.4%. CONCLUSION: The data indicate that autoantibodies are present in healthy Omani individuals, and therefore caution should be taken when interpreting laboratory results of patients suspected of having autoimmune disease.