

Title: IMMUNE SYSTEM ACTIVATION IN RHEUMATIC HEART DISEASE

Category: Valvular Heart Disease

Abstract

OBJECTIVE: To assess activation of immune system in rheumatic heart disease (RHD) patients in the form of AECA, ACL and anti GBM antibodies.

STUDY DESIGN: Descriptive, observational study.

PLACE AND DURATION OF STUDY: Department of Immunology, University of Health Sciences (UHS), Lahore, and Outpatient Department, Punjab Institute of Cardiology, from February 2015 to January 2016.

METHODOLOGY: Clinically suspected patients of RHD and confirmed by echocardiography were included. AECA, ACL and anti GBM antibodies were investigated in the sera of RHD patients.

RESULTS: Eighty-six RHD patients were included in the study; the mean age of the patients was 30 ± 9.3 years. Among these patients, 59 (68.6%) were females and 27 (31.4%) were males. AECA was most commonly detected autoantibody i.e. in 17 (19.8%) patients; whereas, ACL was detected in only 2 (2.3%) subjects. Another 2 (2.3%) patients had both AECA and ACL antibodies. AGBM was not detected in any of the patients. ACL was seen in females with isolated MR. AECA were seen in mixed valvular heart disease patients.

CONCLUSION: Immune system gets activated in RHD patients leading to formation of different antibodies, and they are also related to the type of lesion. ACL antibodies are present in females with isolated mitral regurgitation, while AECA are present in both the genders with mixed valvular heart disease. Anti GBM antibodies are not seen in RHD patients.