could be a promising approach to reduce the decline in functioning and contrib- 
ute to lower fatigue in this population.

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AB0572 DIFFERENTIAL BACKGROUND OF CLINICAL 
AND IMMUNOHISTOLOGICAL CHARACTERISTICS 
in SYSTEMIC LUPUS ERYTHEMATOSUS and 
RHEUMATOID ARTHRITIS COMPLICATED with 
HEART DISEASE

Keywords: Cardiovascular disease, Systemic lupus erythematosus, 
Rheumatoid arthritis

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Background: Systemic lupus erythematosus (SLE) and rheumatoid arthritis (RA) are often complicated by heart disease. In severe cases, heart surgery is 
required, but little is known about clinical background and immunohistological 
pathologies of diseases.

Objectives: The differences in clinical and immunohistological backgrounds of 
each disease were examined by comparing cases of heart disease associated 
with SLE and RA.

Methods: From 2012 to 2021, we observed 45 patients with SLE (32 patients 
underwent surgery), 67 patients with RA [33 patients underwent surgery], and 
8 patients with overlapping SLE/RA (3 patients underwent surgery), all compi-
licated with heart disease. The heart disease cases were divided into the aortic 
valve disease (AV), mitral valve disease (MV), ischaemic heart disease (I), and 
aortic aneurism disease (AA) groups, all from patients who had visited our hospi-
tal. The SLE (S) group consisted of AV, MV, I, and AA in 5, 6, 11, and 13 respective 
cases (10 duplicate cases), and in the RA (R) group there were 24, 12, 15, and 
10 respective cases (6 duplicate cases). Immunohistological analysis of patients 
with left atrial appendage tissue (seven SLE, six RA, and two overlapping SLE/ 
RA patients) was performed on left atrial cardiomyocytes for anti-human IgG, 
IgM, and C3 antibodies. Left atrial cardiomyocytes of eight cases of heart dis-
 ease with non-connective tissue disease were used as the control.

Results: The age (in years) at diagnosis of heart disease in the S and R 
groups was S/R: 57.6/71.5 (p = 0.057), and the duration (in years) from onset of 
the connective tissue disease to onset of the heart disease was S/R: 22.6/10.1 
(p < 0.001), Anti-SS-A antibody (P = 0.041), anti-U1RNP antibody (p = 0.0044), 
and anti-CL2GPI antibody (p = 0.022) showed a high positivity rate in the S group. 
In disease I, the age at the time of diagnosis of heart disease was S/R: 51.6/70.9 
years (p = 0.0083); and in disease AA, the age and duration of disease were S/R: 
63.5/74.8 years (p = 0.0088) and 29.6/70.7 years (p = 0.0013), respectively. There 
was no significant difference in S/R in patients suffering from diabetes, hyperten-
sion, and hyperlipidemia. Immunohistological analysis revealed IgG deposition 
in the cardiomyocytes in six of the seven patients in the S-alone group, while no 
IgG deposition was observed in six patients in the R-alone group. In two patients 
with overlapping S-R, IgG deposition was observed in both. In the S group, two 
or more antibodies of antiphospholipid antibodies, anti-Ro/SSA or anti-U1RNP 
antibodies, were positive in five out of the seven patients, and preoperative anti-
DNA antibody elevation or complement reduction was seen in only two patients. 
Two of the seven patients in the S group were negative for either antibody, and 
a patient showed no IgG deposition uniquely in the S group. Both patients with 
overlapping S-R were positive for anti-CL antibody and anti-Ro/SSA antibody. In 
the R group, all antibodies were negative within the measured range.

Conclusion: A comparison of SLE and RA patients complicated with heart 
disease revealed that the SLE patients tend to be younger at diagnosis than RA

patients and had a longer morbidity period. It is possible that various autoan-
tibodies, such as antiphospholipid antibodies, anti-Ro/SSA antibodies, and 
anti-U1RNP antibodies were involved and had immunological effects on the 
myocardial tissue. In contrast, in RA patients complicated with heart disease, the 
autoantibodies observed in SLE were negative, and immunoglobulins were not 
deposited in the myocardial tissue of the RA patients who underwent surgery, 
suggesting that immunological involvement was poor and older diagnostic age 
was involved.

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AB0573 REASONS FOR BREASTFEEDING AVOIDANCE: A 
MULTICENTER INSIGHT IN MOTHERS WITH SYSTEMIC 
LUPUS ERYTHEMATOSUS

Keywords: Patient reported outcomes, Pregnancy and reproduction

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