- 2 Neidhart M. Prolactin in autoimmune diseases. *Proc Soc Exp Bio Med.* 1998;**217**:408–79

FRI0138 ANTICARDIOLIPIN ANTIBODY ISOTYPE PROFILE AND LUPUS NEPHRITIS SEVERITY BASED ON RENAL BIOPSY PATHOLOGY

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Background Lupus nephritis remains the most prominent organ system manifestation of systemic lupus erythematosus (SLE) and is associated with high morbidity and mortality, particularly in the diffuse proliferative form of the World Health Organisation classification. Evidences have shown that antiphospholipid antibodies may be of pathogenetic significance in lupus nephritis, since glomerular capillary thrombi are an indicator of subsequent renal dysfunction.

Objectives To determine anticardiolipin antibody isotype profile in SLE patients with and without lupus nephritis, and the association with lupus nephritis severity based on renal biopsy classification.

Methods 200 Chinese SLE patients, followed between Jan. 1991 to May 1996 at Kaohsiung Veterans General Hospital Rheumatology Clinic were included in this study. All patients fulfilled ARA criteria for SLE. Anticardiolipin antibody (aCL) was measured by the ELISA according to international standardised method in 100 SLE patients with lupus nephritis verified by renal biopsy (Group A), 100 SLE patients without lupus nephritis (Group B), and 30 patients with renal biopsy-proved nephropathy not due to SLE (Group C). Renal biopsy morphology was assessed using WHO criteria for the classification of lupus nephritis. aCL isotype profile was analysed in each group and in the subgroups of lupus nephritis patients according to WHO classification.

Results

Conclusion In this study, the frequency of aCL in our SLE patients was low as compared to previous reports. It may be due to racial difference. From our preliminary data, though not statistically significant, no difference in the frequency of aCL was identified amongst patients with and without lupus nephritis. No correlation between aCL isotype profile and the severity of lupus nephritis could be demonstrated.

FRI0139 CLINICAL IMPORTANCE OF ASYMPTOMATIC BACTERIURIA IN WOMEN SUFFER FROM SYSTEMIC LUPUS ERYTHEMATOSUS – 5 YEARS OBSERVATION

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Background Infections are frequent cause of death in lupus patients because of disease depending mechanisms and immunosuppressive treatment. Kidneys are often involved in course of lupus. We found asymptomatic bacteriuria in 16,5% women with SLE in first year of our study but longer 5 years observation could help us to understand its clinical importance.

Objectives

- Estimation of incidence of asymptomatic bacteriuria (a.b.) in population of women with SLE in 5 years observation.
- Examination of asymptomatic bacteriuria maintenance in following years of observation.
- Evaluation of incidence of symptomatic pyelonephritis in SLE women with a.b.
- Evaluation of need of antibacterial treatment in SLE patients with a.b.

Methods 85 women aged 24–77 (mean 45,2) years with mean SLE duration 10,2 years (2–33) were examined for 5 years. All of them were fulfilling ARA criteria for diagnosis of SLE. We did bacteriological analysis of SLE women urina 5 times in the 5 following years. Patients were observed clinically and parameters of biochemical and immunological activity were done. Among group with a.b. were counted women who had significant bacteriuria higher than 10^4 in ml urina. We were analysing type of bacteria and antibiotic resistancy.

Results In the following 5 years of observation asymptomatic bacteriuria was found with incidence from 12,8% to 22,5% (mean 17,6%). From 60% to 80% patients with a.b. (mean 70%) eliminated bacteria from urina in period one year without antibacterial treatment. In other patients mean 30% in second urina cultures which was done 1 year after first with a.b., significant bacteriuria was persistent. 50% of women with persistent bacteriuria after one year had in urina the same type of bacteria but in 50% patients type of bacteria was changed. In 5 years only 3 incidence of symptomatic pyelonephritis in SLE women with a. b. was observed. In all 3 cases nephrolithiasis was coexisted with SLE.

Conclusion

- Incidence of asymptomatic bacteriuria in women with SLE was 17,6%.
- 70% patients with a.b. eliminated bacteriuria without antibacterial treatment in one year.

Abstract FRI0138 Table 1

	Age, mean	Sex (F/M)	aCL+ (%)	aCL IgG+ (%)	aCL IgG+, mean (GPL/dl)	aCL IgA+ (%)	aCL IgA+, mean (APL/dl)	aCL IgM+ (%)	aCL IgM+, mean (MPL/dl)
Group A (SLE with nephritis)	29.61	89/11	17	15	32.8	1	31.0	11	16.7
Group B (SLE without nephritis),	34.77	94/6	14	11	28.0	5	37.4	10	30.0
Group C (non-SLE nephropathy),	48.3	10/20	3	2	22.0	1	51.0	1	65.0

Anticardiolipin antibody isotype profile.

- In patients with a.b. in course of SLE symptomatic pyelonephritis was no observed (besides patients with nephrolithiasis).
- Asymptomatic bacteriuria in women with SLE do not need antibacterial treatment.

FRI0140 RELATIONSHIP BETWEEN MHC II CLASS ALLELE POLYMORPHISM AND CLINICAL CHARACTERISTICS OF SYSTEMIC LUPUS ERYTHEMATOSUS

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Background

Objectives To examine the possible correlations between the genetic background and clinical characteristics of the disease in patients with systemic lupus erythematosus (SLE).

Methods Distributions of MHC II Class (DRB1, DQA1 and DQB1) alleles were studied with molecular genetic methods (polymerase chain reaction and restriction fragment length polymorphism) in 50 SLE patients and 50 healthy blood donors as controls. The statistical significance of differences between the examined groups were analysed with Fisher's exact test.

Results In our SLE patients, the DR2 (1501 subtype) – DQA1 0102 – DQB1 0602 ($p = 0.045$), the DR3 – DQA1 05011 – DQB1 0201 ($p = 0.022$), and the DR7 – DQA1 0201 – DQB1 0202 ($p = 0.005$) haplotypes occurred significantly more frequently than in controls. Evaluating the connexion between the genetic and clinical characteristics of the disease, we found that DR2 positivity was less frequent in patients with lupus nephritis (LN) than in those without LN (3/16 vs 16/34, $p = 0.05$). In contrast, DR3- and DR7-associated haplotypes were more common in LN than in patients without renal manifestation (8/16 vs 11/34 and 7/16 vs 8/34, respectively). In patients with pericarditis and/or pleuritis, DR7 positivity was more frequent than in patients without serositis (12/27 vs 3/23, $p = 0.016$). Similarly, the DR7-associated haplotype was detected more frequently in patients with one or more severe (renal, cardiopulmonary, central nervous system) manifestations as compared to patients without these major features (15/36 vs 0/14, $p = 0.002$).

Conclusion We conclude that there are three different MHC II Class haplotypes of susceptibility in Hungarian patients with SLE. In our experience, the DR7-positive cases exhibited more severe disease manifestations, while patients with DR2-positivity had a milder clinical course.

FRI0141 PREVALENCE OF THYROID DISEASE IN SYSTEMIC LUPUS ERYTHEMATOSUS AND PRIMARY SJÖGREN SYNDROME

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Background Thyroid dysfunction (hypo and hyperthyroidism) has been described among patients with connective tissue diseases, particularly in patients with systemic lupus erythematosus (SLE) and primary Sjögren syndrome (PSS). Also a high prevalence of anti-thyroid antibodies (ATA) has been found in these patients.

Objectives To study: 1) Thyroid function and morphology in a population of SLE and PSS patients; 2) To evaluate the prevalence of ATA in these patients; 3) To correlate clinical manifestations with laboratory data.

Methods We studied serum levels of thyroid hormones, TSH, anti-thyroglobulin and anti-microsomal antibodies in 70 consecutive patients (50 with SLE and 20 with PSS), followed in our department. We performed thyroid ultrasound in all patients. Patients were asked about signs and symptoms related to the manifestations of thyroid dysfunction.

Results

Conclusion In this group of patients we found a high prevalence of thyroid morphology abnormalities and thyroid dysfunction. In both groups less than half of the patients with thyroid dysfunction presented related symptoms. These results suggest that all SLE and PSS patients should be routinely screened for thyroid disease even in the absence of clinical manifestations.

FRI0142 CORRELATION BETWEEN HIGH LEVELS OF ANTIBODIES DIRECTED AGAINST THE DOMAIN 1 OF CALPASTATIN AND THE PRESENCE OF VASCULITIS IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Background Calpastatin, an endogenous inhibitor of calpains, calcium-activated cysteine proteases, has been recently identified as a new auto-antigen.^{1,2} Anti-calpastatin antibodies (ACAST) have been detected in venous thrombosis,³ rheumatoid arthritis (RA) but also in other auto-immune diseases such as systemic lupus erythematosus (SLE), Sjogren syndrome or systemic sclerosis. The C-terminal 27 aminoacids fragment of calpastatin represents the major epitope recognised by these antibodies. However, other epitopes, particularly in the N-terminal region of the protein, including the domain 1 (D1), are targeted by antibodies in sera of RA patients.⁴ The clinical relevance of ACAST D1 in SLE remain unknown.

Abstract FRI0141 Table 1

	Females (%)	Age	Years of disease	Abnormal thyroid morphology (%)	Thyroid autoantibodies (%)	Thyroid dysfunction (%)	Asymptomatic thyroid disease (%)
SLE	96	40 ± 13	9 ± 8	38	12	18	56
PSS	95	45 ± 12	7 ± 6	40	25	20	75