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AB0447

IRREVERSIBLE ORGAN DAMAGE IN PERI- AND POSTMENOPAUSAL WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS IN REMISSION

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Background: Although the survival of patients with systemic lupus erythematosus (SLE) has improved, irreversible organ damage remains a critical concern. Long-standing inflammation, drug-related side effects and comorbidities may eventually cause permanent organ damage even in remission [1].

Objectives: To describe irreversible organ damage in peri- and postmenopausal women with SLE in remission and low disease activity, to find predictors of damage progression.

Methods: 234 peri- and postmenopausal women with SLE were included (mean age 49,94±9,1 years) in our study. All women were under outpatient observation in St.Petersburg State Clinical Rheumatology Hospital #25 (Russia). Mean disease duration was 8,9±7,5 years. We analyzed treatment regimens and doses of glucocorticoids (GC) based on source medical documents. To assess disease activity, we used SLEDAI-2K and LLDAS. To assess organ damage, we used SLICC damage index (SDI).

Results: 94,3% of women have been taking GC during our study. Median of maintenance dose was 12,5mg per day. Almost a half of all women (44,8%, n=105) in our study were postmenopausal (mean duration of menopause was 11,1±7,1 years). A half of all patients had low disease activity (44,4%, n=111) or were in remission (18,8%, n=44) according to SLEDAI-2K. 26,5% (n=65) of patients had all 5 criteria and 45,1 % (n=115) of patients had 4 of 5 criteria according to LLDAS. Critical organ damage (SDI>4) was observed in 68,8% (n=161) of women with SLE. Moderate (1≤SDI≤4) and low (SDI=1) damage had 25,6% (n=60) and 6,4% (n=15) of patients respectively. Musculoskeletal damage was on the first place among others: 37,6% (n=88) of patients had osteoporosis with fractures and 34,2% (n=80) had muscle weakness. In 75 women with SLE of osteoporotic fractures occurred in remission or low disease activity (LLDAS). Progression of irreversible organ damage in remission or low disease activity (LLDAS) had 62% (n=145) of women with SLE. Multifactorial logistic regression analysis of factors associated with organ damage in SLE showed that only patients age (p=0.013215), cumulative dose of GC (p=0.000047) and therapy with cyclophosphamide (p=0.041505) were statistically significant.

Conclusion: Progression of irreversible organ damage in peri- and postmenopausal women with SLE may occur despite remission or low disease activity. There are no doubts that organ damage accrual is associated with CG therapy. Correction of GC dose or discontinuation of GC treatment in remission can predict organ damage accrual in SLE including osteoporosis and osteoporotic fractures.

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AB0448

IMPACT OF REMISSION ON DAMAGE ACCRUAL IN SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) PATIENTS: A SYSTEMATIC LITERATURE REVIEW (SLR)

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Authors	Country/Region	Patients	Remission	Achieving remission (%)	Damage: remission vs not remission	NOS
Zen et al	Italy	224	SLEDAI=0 Serologic= allowed PGA= NR PDN ≤ 5 IS=Yes AM=Yes	37.5%	Unremitted disease OR=2.53; p=0.008	7
Tani et al	Italy	115	Duration=5 years SLEDAI=0 Serologic PGA= NR PDN ≤ 5 IS=Yes AM=Yes	49.6%	ΔSLICC 0.12 vs 0.48, p= 0.018	8
Ugarte-Gil et al	Latin America	1,350	Duration=NR SLEDAI=0 Serologic= not allowed PGA= NR PDN ≤ 5 IS=Yes AM=Yes	20.2%	New damage HR 0.60 p=0.0042 Severe new damage HR 0.32 p=0.0033	8
Tsang-A-Sjoe et al	Netherlands	224	Duration=NR SLEDAI=0 Serologic= allowed PGA= NR PDN ≤ 5 IS=Yes AM=Yes	37.6%	OR=0.20; p=0.001	8
Mok et al	China	769	Duration>5 years SLEDAI=0 Serologic= Allowed PGA<0.5 PDN ≤ 5 IS=Yes AM=Yes	25.1%	Not being on remission for at least 5 years OR: 2.42; p<0.001	7
Tselios et al	Canada	267	Duration≥5years SLEDAI=0 Serologic= Allowed PGA=NR PDN no restriction IS no restriction AM=Yes	10.1%	SDI after 10 years: 0.96 vs 1.53 (not on remission, not on LDAS), p for trend =0.029	7
Petri et al	US	1,356	Duration≥5years SLEDAI=0 Serologic= NR PGA<0.5 PDN ≤ 5 IS=Yes AM=Yes Duration= NR	NR	Rate ratio per percentage of follow-up RR(<25%)=0.54; p<0.0001 RR(25-49%)=0.47; p<0.0001 RR(50-74%)=0.43; p<0.0001 RR(>75%)=0.45; p=0.0019	7
Golder et al	Asia Pacific	1,707	SLEDAI=0 Serologic=Yes PGA<0.5 PDN ≤ 5 IS=Yes AM=Yes Duration= NR	35.8%	HR=0.55; p<0.0001	6

NR: Not recorded. OR: Odds Ratio. HR: Hazard ratio. RR: Rate ratio

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Background: Treat-to-target strategy with remission as the target has been proposed for the management of SLE. However, there is not a uniform definition of remission.

Objectives: To determine the protective value of remission state on organ damage accrual in SLE patients through a SLR.

Methods: Two independent reviewers identified studies in Medline and Cochrane Library. Data on remission definitions and rates as well as damage accrual (assessed by the SLICC/ACR damage index [SDI]) were extracted. Definitions of