Characteristics of the Reproductive System in Systemic Lupus Erythematosus: A Cross-Sectional Survey with Pair-Matched Controls.

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Background/Purpose: Patients with Systemic Lupus Erythematosus (SLE) present factors associated with the reproductive system that can increase the risk of the disease, but the literature is controversial. The reproductive system variables are influenced by multiple social, ethnic, economic and cultural factors that can function as confounding variables. For this reason, the optimal SLE population control should be matched by age and sociodemographic features.
We compared reproductive variables of a group of women with SLE with pair-matched healthy controls.

Methods: A case-control study was performed using a cross-sectional survey to analyze variables of the reproductive system in patients with SLE. We included women over 18 years-old with SLE according to ACR criteria. Each case was matched with a healthy control belonging to her sociocultural environment and having her age _ 5 years.
The survey included multiple demographic and disease variables, as well as reproductive system features: age of menarche and menopause, number of pregnancies and fetal losses, and contraceptive methods. Paired t test and McNemar's test or Fisher exact test were applied for continuous and categorical variables, respectively.

Results: We included 83 cases with a mean age of 39.2 _ 10.8 years (range19–66) and the mean age at SLE diagnosis was 26.9 _ 10.3 years. Previous treatments were as follows: 91% hydroxychloroquine, 32% cyclophosphamide, 31% azathioprine, 24% mycophenolate mofetil, and 16% methotrexate.

	Cases	Controls	
Menarche (age $\pm$ SD)	12.8 $\pm$ 1.7	12.4 $\pm$ 1.4	paired t test p 0.15
Menopause (age $\pm$ SD)	43.12 $\pm$ 6.4	50.23 $\pm$ 3.7	paired t test p 0.01
Previous Oral Contraceptives (%)	42%	50%	McNemar's test 1.25 (p 0.26)
Pregnancies (mean $\pm$ SD)	1.7 $\pm$ 1.6	1.9 $\pm$ 1.9	paired t test p 0.34
Fetal Loss (%)	28	28	
Fetal Loss (mean $\pm$ SD)	0.43 $\pm$ 0.8	0.43 $\pm$ 0.8	paired t test p 1.0
Children (mean $\pm$ SD)	1.25 $\pm$ 1.2	1.45 $\pm$ 1.4	paired t test p 0.24
Gestational Age (weeks) (mean $\pm$ SD)	37.8 $\pm$ 3.1	37.9 $\pm$ 3.3	t test p 0.8
Infertility Treatment (%)	6.02	9.6	Fisher exact test p 0.17

When cyclophosphamide was analized as a risk factor for early menopause there were no difference between exposed and non exposed patients

Conclusion: There were no differences in the age of menarche, previous oral contraceptives, number of pregnancies, fetal losses and children, and the need of infertility treatment between SLE patientes and pair-matched controls. The age of menopause is significantly different but cannot be related only to cyclophosphamide.