MENOPAUSE IN AN EGYPTIAN COHORT OF SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS: EFFECT OF THE DISEASE

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Background: Systemic lupus erythematosus (SLE) is a chronic systemic autoimmune disease that mainly affects females in the reproductive age1. Although SLE generally emerges during reproductive ages, it was found that lupus patients experience menopause at younger age than the general population; however, whether the occurrence of menopause at a younger age in lupus patients results from the gonadotoxic effects of Cyclophosphamide treatment or from an autoimmune-mediated ovarian involvement is debated2.

Objectives: To identify menopause characteristics in an Egyptian cohort of women with SLE with effect of the disease on menopausal symptoms and the characteristics of disease activity and disease damage in perimenopausal and post-menopausal patients.

Methods: In this cross-sectional observational study, data of 120 consecutive SLE female patients who fulfilled the 2012 ACR/SILLC criteria3, above the age of 35. Disease activity was assessed by using the SLE disease activity index (SLEDAI)4, and accumulated damage was assessed by Systemic Lupus International Collaborative Clinics/American College of Rheumatology Damage Index (SLICC/ACR DI)5. Laboratory assessment was done to all patients including follicle stimulating hormone (FSH) and luteinizing hormone (LH) blood levels.

Results: The mean age of the patients was 45.067 ± 8.211 years and median disease duration was 5.074 ± 5.567 years (min 0.08 – max 21 years). It was found that the mean of total SLEDAI score was 4.667 ± 3.537 and mean of total SLIC/ACR damage index was 0.633 ± 0.819. Of 120 patients 20% had premature menopause, 29.17% had natural menopause and 50.83% were still menstruating (table 1). It was found that the age at menopause (either natural or premature menopause) ranged from 26 to 54 years with the mean 45.170 ± 7.278 years. There was a statistically significant negative correlation between LH and total SLEDAI (r = -0.178, P = 0.052). It was also found a statistically significant positive correlation between FSH and cumulative Cyclophosphamide dose (r = 0.440, P < 0.001) and between LH and cumulative Cyclophosphamide dose (r = 0.214, P = 0.046) (table 2).

Conclusion: SLE has a reproductive and hormonal impact on female patients, either because of disease activity or due to pharmacological adverse effects. The mean age at menopause (either natural or premature menopause) is 45 years. High LH is associated with lower disease activity. High cumulative Cyclophosphamide dose is associated with high FSH and LH.

REFERENCES