109. OSTEOPOROSIS IN SYSTEMIC LUPUS ERYTHEMAT OSUS

Galina Russu

Scientific adviser: Svetlana Agachi, MD, PhD, Associate Professor, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction: Systemic lupus erythematosus (SLE) is a chronic autoimmune disease with a multisystem involvement. The survival of patients with SLE has improved over the past 10 years grateful of the progress of the disease treatment scheme which now results in a fewer fatal complications. One of the most common and disabled complications of patients with SLE is osteoporosis. This work aimed on evaluating the prevalence of osteoporosis in a cohort of SLE patients and also the risk factors associeted with osteoporosis.

Materials and methods: Patients with a diagnosis of SLE from Republican Clinical Hospital, Moldova. The following data were collected from clinical charts: sex, age, SLEDAI activity, disease duration, daily dose of glucocorticoids, menopausal status, bone mineral density scans (BMD). A total of 40 patients with a diagnosis of SLE include (women-35 and men-5); mean age 48.8±5 years. All the patients had been treated with glucocorticoids at a mean daily dose of 5.84mg.

Discussion: In the research process was observed the following demographic data and clinical characteristics of the cohort: the mean age of non-osteoporotic cohort is 41.14years and 53.13 years at patients with osteoporosis. Also was observed a correlation between osteoporosis and disease duration. In non-osteoporotic cohort the mean disease duration is 9.27 years, while in osteoporotic cohort is 12.9 years. In accordance with the activity of disease, based on SLEDAI-2K score in our cohort: non-osteoporotic have 78.57% -23-34/105 and 21.42% - 68-77/105, while osteoporotic patients have 64.2%-27-39/105 and 35.8%-63-80/105.

Our data confirmed the association with the post-menopausal status. Only 7.14% of non-osteoporotic patients are in menopause, while 70% in osteoporosis. Based on the BMDscans we observed that more than 55% of our patients chronically treated with glucocorticoids had low bone mineral density and 29.3% had osteoporosis. In five of them experienced values of BMD corresponding to osteoporosis at the vertebral site. We established 2.42% in non-osteoporotic cohort and 6.9% in osteoporotic cohort an incorrect and incomplete uptake of the background medication in SLE or low compliance to the medical indications.

Conclusion: The osteoporosis in SLE is multifactorial. All of this factors determine the increase of bone turnover that raise the risk of fracture. Modifiable risk factors include the systemic inflammation and the medications used to control the disease. The results of the research confirm that our patients were treated chronically with low doses of glucocorticoids because it was considered safer or was no monitoring of the treatment and the mainly part of patients abandon on the initial stages. Thats why prevention and treatment of osteoporosis should entail a multifaceted approach and it's required to treat SLE aggressively as soon as is diagnosed.

Key words: Lupus, osteoporosis, glucocorticoids.