Abstract

Background: During menopause occurs weight gain and bone loss occurs due to the hormone decline during this period and other factors such as nutrition. Magnesium deficiency suggests a risk factor for obesity and osteoporosis. Objective: To evaluate the clinical and nutritional magnesium status in a population of postmenopausal women, assessing intake and serum levels of magnesium in the study population and correlation with anthropometric parameters such as body mass index (BMI) and body fat, and biochemical parameters associated. Subjects and Method: The study involved 78 healthy women aged 44-76, with postmenopausal status, from the province of Grenade, Spain. The sample was divided into two age groups: group 1, aged < 58, and group 2 aged 58. Anthropometric parameters were recorded and nutritional intake was assessed by 72-hour recall, getting the RDAs through Nutriber® program. To assess the biochemical parameters was performed a blood sample was taken. Magnesium was analyzed by flame atomic absorption spectrophotometry (FAAS) in erythrocyte and plasma wet-mineralized samples. Results: Our results show that 37.85% of the total subjects have an overweight status. Magnesium intake found in our population is insufficient in 36% of women, while plasma magnesium deficiency corresponds to 23% of the population and 72% of women have deficient levels of magnesium in erythrocyte. Positive correlations were found between magnesium intake and dietary intake of calcium, of phosphorus, and with prealbumin plasma levels, as well as with a lower waist / hip ratio. Magnesium levels in erythrocyte were correlated with lower triglycerides and urea values. Conclusion: It is important to control and monitor the nutritional status of magnesium in postmenopausalwomen to prevent nutritional alterations and possible nopáusica para prevenir alteraciones clínico-nutriciona- clinical and chronic degenerative diseases associated with les y posibles enfermedades crónico degenerativas rela- magnesium deficiency and with menopause. cionadas con la deficiencia del magnesio y la menopausia. (Nutr Hosp. 2014;29:658-664) DOI:10.3305/nh.2014.29.3.7198

Keywords