

BONE MARKERS IN MONITORING OF ANTIRESORPTIVE THERAPY IN POSTMENOPAUSAL OSTEOPOROSIS PATIENTS

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The aim of this work was to study the effect of two modalities of antiosteoporotic therapy in postmenopausal women at the level of biochemical markers of bone turnover such as bone specific alkaline phosphatase (BALP) and deoxypyridinoline (Dpd) as well as bone mineral density (BMD). The study included 87 patients with postmenopausal osteoporosis (OP). Group A consisted of 48 patients treated with alendronate (AL), whereas group B included 39 patients treated with hormone replacement therapy (HRT). BMD was measured by Lunar DPX 2000 device, on the lumbar spine and the femur, and bone markers (BM) were measured by commercial ELISA assays. There was a statistically significant decrease in the levels of BALP and Dpd after 6 weeks and 8 months of both types of therapy compared to the level of these markers before therapy. There was a statistically significant increase of BMD on both locations after 8 months of both therapies. In addition, there was a statistically significantly higher degree of changes of Dpd values in the group treated with AL than in the group treated with HRT. On the other hand, the changes in the level of BALP were significantly higher in the group treated with HRT. We concluded that the early effect of the two studied antiosteoporotic medications can be monitored by changes in the levels of BM. Dpd as bone resorption marker proved to be a better indicator of the efficiency of applied medications compared to bone formation markers such as BALP. *Acta Medica Medianae 2015;54(3):5-11.*

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