INFLUENCE OF RISC FACTOR ON BONE MINERAL DENSITY IN OSTEOPENIC PATIENT WITH LUMBAL SPONDYLOARTHROPAT

II Środkowo Europejski Kongres Osteoporozy i Osteoartrozy oraz XIV Zjazd Polskiego Towarzystwa Osteoartrologii i Polskiej Fundacji Osteoporozy, Kraków 11-13.10.2007
Streszczenia:
Ortopedia Traumatologia Rehabilitacja 2007, vol 9 (Suppl. 2), s1158.

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INFLUENCE OF RISC FACTOR ON BONE MINERAL DENSITY IN OSTEOPENIC PATIENT WITH LUMBAL SPONDYLOARTHROPATY

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Key words: osteoporosis, risk factor, lumbar spondyloarthropaty

Introduction
Lumbal spondyloarthropaty (LS) is degenerative disease of low spine which affects all element of vertebral dynamic segment. LS is characterized by appearance of bone apposition which can produced pain, compression on nerve root, reduce mobility this segment of spine and also reduced globally patient daily activity which can produced many complication. As a complication of patient inactivity is reduced Bone Mineral Density (BMD) and further osteoporosis.

Aim
The aim of study was to establish how risk factors influence on BMD in osteopenic patient with LS.
Material and methods
We examined 82 patients age 64.29 (46-86), with most predominant female. All patients had arthritic changes on radiography of lumbal spine which was verified and now in grade I to III of Kellgren & Lawrence radiographic scale. Analysis of BMD was performed with „Sahara" ultrasound osteodesitometry. We used Body Mass Index (BMI) scale, National Health Center Statistic Criteria and self-evaluation of health by patients.
Results
Average body mass was 73.83 kg (SD±5.19) and body height was 1.62 cm (SD±0.66) which was indicated that our patient was globally short. Average BMI was 28.156kg/m2 which indicate that we had overweight patient. We found that 53.24% of patient exposed daily more than 15 minutes on sun and 63.41% drink more than 200ml of milk and eat milk product. Estimated BMD was 0.361g/cm2, average T-score was -1.98 and value of Z-score was -1.08. We found very statistically significant correlation (r=0.546; p=0.000) between daily walking activity, less than 2 km per day which was acceptable to patient with LS, in 41.57% of patient and T-score which indicted important role of walking as long as be possible in increasing BMD. Also we found statistically significant negative correlation (r=-0.329; p=0.035) between T-score and reduction in body high which was more than 3 cm which point on worse prognosis in patient who during LS decreased body height. Statistically significant better result we found in group of patient treated with hondroprotective drugs.
Conclusion
Daily physical activity and more adequate intake calcium can improve BMD in patient with LS. Our suggestion is that hondroprotectiv drug has to be included in therapeutic scheme which in combination with physical activity can give better result in increasing BMD.