

P07 BONE MINERAL DENSITY ACCORDING TO ANSWER IOF'S ONE-MINUTE OSTEOPOROSIS RISK TEST

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This research aimed at evaluating the bone mineral density according to answer IOF's one-minute osteoporosis risk test.

Materials and methods. The study included two stages. Test was translated into Ukrainian. At the first stage, structural-functional state of bone was evaluated by means of an ultrasound bone densitometer ("Achilles+"). We've examined 147 postmenopausal women aged 50-69 years (mean age 59,8 ±0,7). The speed of sound (SOS, m/s), broadband ultrasound attenuation (BUA, dB/MHz) and "Stiffness" index (SI,%) were measured.

Results. Parameters of ultrasound densitometry at patients who have answered positively on II (Have you broken a bone after a minor bump or fall), III (Have you ever taken

corticosteroid tablets for more than 3 consecutive months) and IV (Have you lost more than 3 cm in height) questions, were significantly less in comparison with the patients who have answered negatively. SI at patients with the positive answer to the on II the question has made $74,0 \pm 1,7\%$, with negative – $81,2 \pm 1,3\%$, $p = 0,002$; on III – $67,1 \pm 3,9\%$ and $79,9 \pm 1,1\%$, $p = 0,0013$; on IV – $71,6 \pm 1,7\%$ and $82 \pm 1,2\%$, $p < 0,00001$. Rate of osteoporosis depending on the positive answer to the following questions has been made: to the on II question – $46,67\%$, to the on III – $81,82\%$, to the on IV – $58,1\%$. At the second stage of BMD, T and Z-score of the spine, femoral neck were determined by DXA using a densitometer Prodigy (GE Medical systems). We've examined 73 postmenopausal women aged 50-69 years (mean age $63,9 \pm 0,9$). Significant correlation between the answer to the on II a question and BMD spine ($r = -0,29$; $p = 0,012$) and BMD femoral neck ($r = -0,32$; $p = 0,005$); between the answer to the on IV a question and BMD spine ($r = 0,29$; $p = 0,047$) was found.

Conclusion. Application of IOF's one-minute osteoporosis risk test gives an opportunity to determine structural-functional changes of bone.