[P56] NEW POSSIBILITY TO EVALUATE BONE QUALITY IN FEMALE WITH DM2

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Aim: of our study was to evaluate bone quality during DXA with TBS to improve understanding the role of bone degraded in DF pathogenesis.

Method: It was cross-sectional study that involved 59 female with DM2 after menopause recruited in our endocrine department in 2015. The mean age was 62,3±6,6, duration of DM2 13,0±7,4, mean duration of menopause was 12,4±7,2 years. During ДХА we evaluated bone mineral density (BMD) in femur neck and lumbar spine. T-criteria and TBS were measured. FRAX algorithm used for 10-years risk of fracture estimation. The correlation with anthropometric, anamnesis parameters, FRAX and BMD was evaluated. For TBS interpretation we have taken recommendations of International European Group of TBS-users, in which TBS < 1,2 means degraded micro-architecture; TBS =1,2-1,35 – particularly degraded micro-architecture and TBS>1,35 – normal.

Results/Discussion: Osteoporosis (T-<2,5 SD) was revealed in 2 (3,4%) patients, osteopenia (-2.5<T<-1.0 SD) – in 22 (37,3%). The TBS in this group was 1,15±0,13. TBS less than 1.35 was in 41 (69,5%) patients. TBS less than 1,2 – in 22 (37,3%), in the interval 1,2-1,35 – in 17 (28,8%). It was revealed moderate negative correlation with FRAX for major osteoporotic fractures (r=-0,41), and with weight, height and BMI of patients (r=-0,43; -0,35;-0,39 respectively). Only weak correlation between DM2 and menopause duration and TBS have calculated (r = 0,24, r = -0,28). It was very low correlation between TBS and HbA1C (r=-0,18).

Conclusion: We have found that female with DM2 in menopause have changing of bone quality. We will planning to evaluate a bone quality using TBS in female with DF, especially with arthropathy Charcot.