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P159 - EFFICACY OF FRAX® IN FRACTURE PREDICTION IN 501 OUTPATIENTS FOLLOWED FOR 11 YEARS
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Aims: FRAX® has been validated in extensive numbered studies, but one may not be certain whether data obtained from a mixture of various populations is suitable for a particular population. The aim of the work was to evaluate the efficacy of FRAX® in fracture prediction in patients of our Centre in 11-year observation.

Methods: A group of 501 women who attended our clinic between 1997-2000 and underwent DXA scans (spinal and/or femoral neck) together with a detailed questionnaire covering clinical risk factors was selected. The average age of the patients was 61 yrs (sd 5.86), av. BMD T-score spine was -2.13 (sd 1.43), BMD T-score of femoral neck was -1.27 (sd 1.11). Patients’ mean BMI was 26.9 (sd 4.2). 10-year fracture risk was calculated using FRAX® for the English population both for BMI and BMD. All patients were interviewed by telephone after the average of 11 yrs (sd 1.01) and detailed information on fractures was collected.

Results: In 11-year observation period the percentage of patients with a fracture increased from 29% to 42%. 10-year risk of major osteoporotic fracture (FRAX®-BMI) was av. 8.0% (sd 6.14) and for the hip fracture - 1.4± (sd 2.4). Risk of major fracture based on neck BMD in 384 women was av. 10% (sd 8.3) and for hip fracture - 2% (sd 0.9). Individual analysis of risk factors shows a significant relation between fracture risk in patients with the history of fracture (p<0.01) and hip fracture in mother (p<0.03). The remaining factors did not show a significant relationship. 10-year fracture risk of major fracture differed significantly in patients with a history of fracture as compared to those without it: for BMI – 16.2% vs. 7.4%, and BMD – 15.4% vs. 7.9%, p<0.0001. Difference was also found between patients who sustained a new osteoporotic fracture during observation: for BMI major 11.8% vs. 9.6%, BMD – 12.4% vs. 9.7%, p<0.0001.

Conclusions: Previous fracture and fracture in mother are the strongest risk factors. We found FRAX® effective in fracture prediction among our patients in 11 yrs follow up.

Disclosure of Interest: None Declared

P160 - BONE MASS AND OTHER VARIABLES IN BODY COMPOSITION IN POST MENOPAUSAL WOMEN
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Aims: Identify the influence of anthropometric variables on bone mineral content in post menopausal women.

Methods: A cross sectional study that included 154 women, 40 years and more referred by their physicians to the Jimenez Diaz Foundation, between September 2007 and February 2008. After receiving the consent from each woman, an interview was conducted to identify sociocultural, gynecological, obstetric factors and body composition. In terms of body composition the following was determined: body mass index, Cormic index (height seated/height standing) humerus and trochanter diameter, hip, waist and arm circumference. Fat distribution estimated by plicometer and by bio impedance all the anthropometric variables were evaluated according to IBP norms. Densitometry was done in both lumbar column and waist regions allowing us to divide the women in 3 groups: normal bone mass, low bone mass and osteoporosis (using T-score according to WHO criteria). Statistical analysis Central measure tendencies. Pearson and Sperman correlations were used depending on type of variable being analyzed. A value of p<0.05 to establish statistically significant differences.

Results: Twenty five± of the woman ha normal bone, 38% low bone mass and 35% osteoporosis. The women in the last group were: older with lower body mass index, femur and humerus diameter, hip, waist and arm circumference (p<0.05) as well as lower total fat percentage, and by bioimpedance.

Conclusions: We identified other variables of body composition that influence bone mineral content, but need more time before we are able to apply this measures to clinical practice.

Disclosure of Interest: None Declared

P161 - THE EFFECT OF THE EXERCISE ON BONE MASS FOR PEOPLE WITH DOWN SYNDROME
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Aims: The aim of the this study to investigate the effect of the resistant and jumping exercise to bone mineral density (BMD) and content(BMC) of people with Down Syndrome (DS)

Methods: DS and normal individuals aged 10-30 randomized exercise and control group. DS control group (n:15), exercise group (n:17), normal control group (n:18), exercise group (n:20). Supervised 45 minute exercise was given to DS exercise group three times per week for 6 months. 6 monthly home exercise program was given to normal exercise group. Lumbar total, femur neck, total BMD (gr/cm2) and BMC (gr) was measured before and after 6 months exercise study with DXA. Hand holding strength (kg) was determined with hand dynamometer before and after 6