

P385

BMD AND BONE TURNOVER MARKERS ALTERATIONS IN WOMEN WITH ENDOMETRIOSIS DURING MENSTRUAL CESSATION DUE TO GNRH THERAPY AND AFTER MENSTRUAL RESTORATION

A. D. Anastasilakis¹, S. Papachatzopoulos², M. P. Yavropoulou³, A. Gkiomisi², P. Nikolakopoulos², S. A. Polyzos⁴, I. Ballaouri⁵, K. Aliazis⁶, T. Barbounis⁶, A. Papatheodorou⁶, S. Fermanoglou⁷, P. Makras⁸

¹Dept. of Endocrinology, 424 General Military Hospital, Thessaloniki, ²Dept. of Obstetrics & Gynecology, 424 General Military Hospital, Thessaloniki, ³Endocrinology Unit, 1st Dept. of Propaedeutic & Internal Medicine, School of Medicine, National and Kapodistrian University of Athens; Department of Medical Research, 251 Hellenic Air Force & VA General Hospital, Athens, ⁴First Laboratory of Pharmacology, School of Medicine, Aristotle University of Thessaloniki, Thessaloniki, ⁵Analysis laboratories, Thessaloniki, ⁶Dept. of Medical Research, 251 Hellenic Air Force & VA General Hospital, Athens, ⁷Dept. of Bone Densitometry, AXEPA Hospital, Thessaloniki, ⁸Dept. of Medical Research, 251 Hellenic Air Force & VA General Hospital; Dept. of Endocrinology & Diabetes, 251 Hellenic Air Force & VA General Hospital, Athens, Greece

Objective: In this prospective, controlled, open label study among women with endometriosis we aimed to investigate the acute skeletal effects of a short treatment period with a GnRH analog.

Methods. Premenopausal women (n=21, age 35.4±7.6 y) with surgically verified endometriosis received once monthly goserelin s.c. for 6 months. Following goserelin discontinuation patients were monitored for another 6 months after menstrual restoration. Age- and BMI-matched premenopausal, healthy, untreated women served as controls (n=19, age 37.1±3.6 y). BMD at the lumbar spine (LS) and the femoral neck (FN), and bone turnover markers (BTMs; P1NP and CTx) were measured before treatment (baseline), at 6 months of treatment (6mo), and 6 months after menstrual restoration (12mo).

Results: Baseline LS- and FN-BMD values did not differ between patients and controls (1.217±0.036 vs. 1.225±0.041, p=0.925 and 1.000±0.038 vs. 0.986±0.036, p=0.807, respectively). In controls, LS- and FN-BMD did not change during the study. Among patients both LS- and FN-BMD decreased from baseline to 6mo (1.217±0.036 vs. 1.145±0.035 g/cm², p<0.001 and 1.000±0.038 vs. 0.975±0.039 g/cm², p=0.001, respectively), while LS-BMD increased again from 6 to 12mo (1.145±0.035 vs. 1.193±0.038 g/cm², p<0.001) but FN-BMD remained stable (0.975±0.039 vs. 0.966±0.035 g/cm², p=0.69); both LS- and FN-BMD at 12mo remained below the baseline values (p=0.004 and p=0.006, respectively). CTx and P1NP increased from baseline to 6mo (349.4±47.3 vs. 629.1±65.5 pg/ml, p<0.001 and 40.4±4.4 vs. 81.2±7.7 ng/ml, p<0.001, respectively) and decreased from 6 to 12mo (629.1±65.5 vs. 324.6±46.7 pg/ml, p<0.001 and 81.2±7.7 vs. 60.6±9.7 ng/ml, p=0.004, respectively), returning to baseline levels.

Conclusion: In premenopausal women treated with goserelin menstrual cessation results in rapid increases of BTMs and decreases of BMD values. These changes are partially reversed 6 months after menstrual restoration.

P386

LOW BACK PAIN IN MEN AND WOMEN WITHOUT SPONDYLOARTHRITIS

O. Iaremenko¹, K. Mazanko¹, D. Fedkov¹, D. Dobrianskyi¹, O. Smirnova¹, V. Zhukova¹

¹Bogomolets National Medical University, Dept. of Internal Medicine #3, Kyiv, Ukraine

Objective: To determine the lower back pain (LBP) and inflammatory back pain (IBP) prevalence, characteristics, gender differences among patients (pts) without spondyloarthritis (SpA).

Methods: 1799 pts, including 736 men and 1063 women, with general therapeutic, urological, and neurological pathologies completed the questionnaire developed in the Internal Medicine Department #3 of Bogomolets National Medical University. The presence or history of LBP, its cause, localization, onset, signs of IBP determined by Calin criteria [1] were analyzed depending on sex.

Results: 1567 of 1799 pts (84.9% of men and 87.6% of women) with mean age 41.4±17.1 reported the presence or history of LBP. 95.4% (1717 pts, 696 men and 1021 women, mean age 41.4±17.1) were patients without SpA. In this group, 50.4% of men vs. 44.1% of women had decreased pain after exercise (p<0.05). Also, in men, LBP was preceded by trauma 1.5 times more often than women (p<0.05). The age distribution of the onset of LBP had no significant difference between gender groups. Gradual onset of pain characterized both sexes. 19.3% of men and 18.3% of women had morning stiffness for >30 min (p>0.05). Four of the five signs of IBP had 16.5% (17.8% of men and 15.7% of women). The most common combination (7.7%) of IBP signs was: the onset of back pain up to 40 y, the gradual onset of back pain, morning stiffness, relief of back pain during exercise.

Conclusion: The prevalence of LBP in patients without SpA is high for both sexes. In men, in comparison with women, LBP is more often related to previous trauma and decreases after physical activity. The prevalence of IBP is high among the patients without SpA, which indicates the need for additional procedures to exclude SpA in this pts group and may indicate the low specificity of the Calin criteria.

Reference: 1. Akgul O, Ozgocmen S. World J Orthop 2011;2:107.