

WORLD CONGRESS  
ON OSTEOPOROSIS,  
OSTEOARTHRITIS AND  
MUSCULOSKELETAL  
DISEASES

# VIRTUAL CONGRESS

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2022 VIRTUAL



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AbstractBook

vate TBS was low=1200. Due to acromegaly remission, only serial checkup is recommended in addition to daily 1000 UI cholecalciferol.

**Conclusion:** In this acromegalic patient, TBS seems more relevant than BMD-DXA; initial anomalies of bone formation markers may be correlated with GH/IGF1 values; concurrent coxarthrosis might explain hip DXA results.

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### P335

#### CONSIDERATION OF DEPRESSIVE SYMPTOMS IN OUTCOME ASSESSMENT MAY BE CRITICAL TO REFLECT CAPACITIES OF PATIENTS WITH KNEE OSTEOARTHRITIS

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**Objective:** To study the impact that depressive symptoms may have on the results of functional outcome assessment in patients with advanced to severe knee osteoarthritis, according to the degree of objectivity the outcome measure used.

**Methods:** This was an observational study, in which 244 patients with clinical (pain  $\geq 3$ ) and radiological symptoms (KL  $\geq 3$ ) of knee osteoarthritis participated. Patient-reported (subjective), clinician-reported (objective) and performance-based measures were assessed in terms of the Oxford Knee Score (OKS), the knee range of motion (KROM) and the Timed up and go (TUG) respectively. Participants with depressive symptoms were classified for having no, mild or severe symptoms according to the Yesavage scale.

**Results:** Overall, 30.7% of participants presented with depressive symptoms. Depressive symptoms differently correlated with the measures: The association with OKS was moderate ( $r=-0.387$ ); however, the correlation with the TUG was low ( $r=0.176$ ), and no correlation was found with KROM.

**Conclusion:** Consideration of depressive symptoms in outcome assessment may be critical to ensure data collected to accurately reflect patients' capacities and selfperceived status, since the results of patient-reported questionnaires may underestimate the clinical status of patients with severe knee OA who present with

depressive symptoms. Psychological status, as well as outcome measures that consider the perspective of both clinicians and patients should be included on a routine basis.

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### P336

#### RELATIONSHIP OF FUNCTIONAL CLASS AND XANTHINE OXIDOREDUCTASE ACTIVITIES IN PLASMA AND LYMPHOCYTES OF RHEUMATOID ARTHRITIC PATIENTS

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**Objective:** Evaluation of xanthine oxidase (XO) and xanthine dehydrogenase (XDG) activities in plasma and lysed lymphocytes depending on the functional class (FC) of rheumatoid arthritis (RA) patients.

**Methods:** Lymphocytes were isolated by A. Böyum's method. XDG (EC 1.17.1.4) and XO (EC 1.17.3.2) activities in plasma and lymphocytes were measured spectrophotometrically and expressed as nmol/min/ml [1]. Enzymatic activities in lymphocytes were normalized to  $1 \times 10^7$  cells/ml. Statistical tests were selected in line with common guidelines. The results were expressed as Me [ $Q_{25}$ ;  $Q_{75}$ ]. Spearman's correlation coefficient was used. Differences were considered significant when  $p < 0.05$ .

**Results:** 77 RA patients (20 males and 57 females, mean age 45 [37; 49] y, mean disease duration 8 [6; 10] y) from the rheumatology unit of Volgograd Clinical Emergency Hospital #25 as well as 35 healthy controls (16 males and 19 females) were included in the study. Diagnosis of RA had been verified using ACR/EULAR 2010 criteria. Most RA patients (92.8%) had 2 and 3 FC. Reference ranges for plasma and lymphocyte XO activities were 2.29-4.31 and 14.11-31.33 nmol/min/ml, respectively. Similar ranges for XDG activities were 4.52-5.97 and 18.62-39.64 nmol/min/ml, respectively. XO activity is increased in blood plasma, XO and XDG activities ( $p \leq 0.001$ ) is decreased in lymphocytes of RA patients. The XO activity of plasma as well as the XO and XDG activities of lymphocytes were correlated with the FC of RA patients ( $p < 0.001$ ). An increase in the FC were characterized by more high XO activity in blood plasma as well as lower XO and XDG activities in lymphocytes.

**Conclusion:** An increase in the oxidase form of xanthine oxidoreductase activity, which generates reactive oxygen species, is accompanied by a decrease in functional capabilities and a deterioration in the quality of life in RA patients.