operation characteristics (ROC) was examined to determine cut-off index (COI). Finally, statistically evident variants in the ROC study was examined to clarify the validity of the variant as a risk factor using Kaplan-Meier survival curve analysis again.

**Results:** A total of 239 patients were recruited. Mean age was 73.6 years and mean follow up period was 52.4 months. Mean T-score in the lumbar spine and femoral neck were -2.10 and -1.85. Using BLR, PS-VAS, estimated glomerular filtration ratio based on cystatin C (eGFR_CysC), prevalent BFF (pr-BFF), and SDAI remission rate were significant correlation with incident BFF. In these, PS-VAS and pr-BFF demonstrated significant higher risk ratios using a multivariate cox regression analysis. In the ROC, COI of PS-VAS was 24.6 and the area-under-the-curve was 0.669 (p<0.001). Finally, PS-VAS ≥ 24.6 mm had 3.506 fold higher hazard ratio than PS-VAS < 24.6 mm using Kaplan-Meier survival curve analysis.

**Conclusion:** These results suggested pain control in treating RA is the important task in order to avoid incident BFF in postmenopausal female patients with RA.

**Acknowledgements:** NIL.

**Disclosure of Interests:** None Declared.

**DOI:** 10.1136/annrheumdis-2023-eular.806

**AB1233**

**IMPACT OF RHEUMATOID ARTHRITIS ON THE DENSITOMETRIC STATUS OF WOMEN**

**Keywords:** Rheumatoid arthritis, Osteoporosis

L. Rouached¹, J. Soua¹, S. Bouden¹, A. Ben Tekaya¹, I. Mahmoud¹, R. Tekaya¹, O. Saidane¹, L. Abdelmoula¹, L. Charles Nicolas Hospital, Rheumatology Department, Tunis, Tunisia

**Background:** Rheumatoid arthritis (RA) is the most common chronic inflammatory rheumatic disease. It can be associated with several comorbidities including osteoporosis (OP). The origin of this bone loss is multifactorial. A fracture episode is the complication of osteoporotic disease and constitutes all the gravity of this disease.

**Objectives:** The objective of this work was to evaluate bone densitometry (BMD) in women with RA and to identify its relationship with disease parameters.

**Methods:** This was a cross-sectional study, including patients followed for RA meeting the ACR/EULAR 2010 criteria. For each patient, disease parameters (duration of progression, activity score [DAS28 VS]), functional impact (HAQ), corticosteroid intake) were assessed and BMD of the lumbar spine and femoral neck was performed in all patients.

**Results:** A total of 76 women were included, 66% of whom were postmenopausal. The mean age of the patients was 52±6.9 years and the mean duration of RA progression was 11.3±7.9 years. The mean DAS28 VS score was 4.3±1.4 and the mean HAQ was 0.98±0.8. Corticosteroid use was noted in 62 patients (81.5%) at a mean dose of 8.6±3.2 mg/day. Regarding the densitometric profile of the patients, the mean BMD values at the vertebral and femoral sites were -1.4±1.3DS and 0.8±1.1DS respectively, and the prevalence of osteoporosis and osteopenia were 21.6% and 46.6% respectively. Patients with osteoporosis (OP) were older (p=0.00), and there was a significant relationship between OP and menopausal status (p=0.007). In contrast, disease parameters (function, activity, duration and treatment) were not associated with the occurrence of osteoporosis in our series: HAQ (p=0.6), disease duration (p=0.3), disease activity (p=0.3) or corticosteroid use (p=0.9).

**Conclusion:** OP is a frequent comorbidity associated with RA. It should be systematically detected because of its functional and vital complications. In our study, the occurrence of OP was more frequent at an older age during RA and menopausal status. There was no relation with the disease parameters.

**REFERENCES:** NIL.

**Acknowledgements:** NIL.

Disclosure of Interests: None Declared.

**DOI:** 10.1136/annrheumdis-2023-eular.2733

**AB1234**

**THE BODY COMPOSITION IMPACT ON OSTEODENSITOMETRY VALUES IN PERSONS OLDER THAN 65 YEARS**

**Keywords:** Diet and nutrition, Osteoporosis, Diagnostic tests

R. Matijević¹, M. Obradović¹, O. Dulic¹, M. Vranjes¹, A. Savic¹, T. Icin¹, L. Medical Faculty in Novi Sad, Orthopedic and Trauma Clinic, Novi Sad, Serbia; T. Medical Faculty in Novi Sad, Rheumatology, Novi Sad, Serbia; M. Medical Faculty in Novi Sad, Endocrinology, Novi Sad, Serbia

**Background:** The aging process is a normal physiological phenomenon and has an impact on the body composition and physical fitness of the elderly. It is characterized by a progressive increase in total body fat mass, a decrease in muscle mass and changes in distribution in terms of an increase in abdominal fat tissue. These changes in the elderly have a great impact on health, functional capacity, and quality of life. The variability of body composition components contributes to the origin and progression of pathology and disability. Today osteodensitometric examination is considered one of the most versatile imaging techniques for assessing osteoporosis, sarcopenia, and obesity, and is currently the only technique capable of identifying all of these conditions at the same time. Osteoporosis is characterized by low bone mass and microarchitectural bone loss, leading to an increased risk of fracture caused by a minor trauma.

**Objectives:** To determine the presence of normal values of T score, osteoporosis and osteoporosis, to determine the distribution of BMI and values of lean muscle mass, adipose tissue and visceral adipose tissue of the examined population.

**Methods:** In this retrospective study conducted from March to April 2019 at the University Clinical Center of Vojvodina, 699 respondents of both sexes over 65 participated. Exclusion criteria were established osteoporosis and treatment. The research consisted of collecting general information of the respondents (gender, age, smoking status, level of education, marital status). Body composition (BMI, FM, VAT, LM) was measured by osteodensitometric examination. Also, all subjects body weight, and height were measured and their body mass index (BMI) was determined.

**Results:** The average age of respondents was 71.92 ± 5.14, most respondents 50.6% have secondary education, 52.2% are married, 9.5% are smokers. The classification of the total T score shows a normal finding in 26.8%, with osteoporosis 58.4% and with osteoporosis 14.8% of subjects. According to BMI (with a normal finding is 16.5%, overweight is 38.5% and obese 45% of respondents. The average BMI of men is 28.79 ± 4.01, and for women the average BMI is 29.92 ± 4.91. The average value of VAT is 1,537 ± 0.820, FM 31,105 ± 9.152 and LM 43,735 ± 8.279. Men have higher average VAT values (2.06 ± 0.90) compared to women (1.32 ± 0.67). The average FM is higher in women (32.49 ± 8.88) than in men (2760 ± 8.89). The average VAT is higher in men (53.38 ± 705) than in women (39.92 ± 4.97). Subjects with normal findings were 61.5% obese, with osteoporosis 40.2%, and with osteoporosis 28% obese. The measured value of LM in persons with normal findings is 47.921 ± 8.738, with osteoporosis 42.342 ± 7.378, with osteoporosis 40.443 ± 6.949. The measured value of FM in persons with normal findings is 34.37 ± 9.51, with osteoporosis 30.20 ± 8.75, and with osteoporosis 2760 ± 7.14. The measured value of VAT in persons with normal findings is 34.37 ± 9.51, with osteoporosis 34.37 ± 9.51, with osteoporosis 2760 ± 7.14.

**Conclusion:** Higher values of BMI, LM, FM, and VAT have a positive effect on the hip and spine T score, and a protective role against osteoporosis.

**REFERENCES:**


**Acknowledgements:** NIL.

Disclosure of Interests: None Declared.

**DOI:** 10.1136/annrheumdis-2023-eular.3645

**AB1235**

**PREVALENCE OF OSTEOPOROSIS IN AN ALGERIAN POPULATION WITH OSTEARTHROSIOSIS: CROSS-SECTIONAL STUDY**

**Keywords:** Osteoporosis, Osteoarthritis, Descriptive studies

B. Abdelatif¹, A. Djebbari², S. Oulebsir³, B. Bennedjema², C. Makhloufi-Dahou², A. Ab Ayad³, H. HAMUS, Rheumatology, Algiers, Algeria; H. HAMUS, Rheumatology, Algiers, Algeria; H. Hôpital Bab el oued, Rhumatology, Bab el oued, Algeria

**Background:** The objective of this work was to evaluate bone densitometry (BMD) in women with RA and to identify its relationship with disease parameters.