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AbstractBook

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APPLICATION OF DIFFERENT APPROACHES TO DETECTION OF PATIENTS WITH A HIGH RISK OF FRACTURES IN THE RUSSIAN POPULATION

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Objective: To compare the clinical and cost-effectiveness of two approaches to identifying patients at high risk of fractures: ISCD recommendations for referral to DXA densitometry and the 10-year fracture risk assessment tool (FRAX).

Methods: We conducted a multicenter, cross-sectional study of postmenopausal women who did not receive anti-osteoporosis therapy. The sample included 4042 postmenopausal women aged 40 years and older, residents of 6 cities of the Russian Federation. Two approaches to identifying patients at high risk of fractures were analyzed: referral of patients to densitometry based on the 2019 ISCD recommendations, and identification of patients at high risk of fractures based on the calculation of the 10-year risk of fractures using the FRAX algorithm. Indicators of diagnostic value of the methods were evaluated: sensitivity, specificity and accuracy of the test, and the cost of diagnosing one case of high risk of fractures.

Results: The analysis showed that the use of a strategy based on the recommendations of the ISCD leads to an unreasonably high number of densitometric studies and an increase in the cost of diagnosing high risk fractures. The use of the FRAX algorithm made it possible to identify a larger number of patients with optimal use of the DXA resource. The proportion of individuals who needed densitometry was 71.4% and 54.0% for ISCD and FRAX, respectively ($p=0.0001$). The sensitivity index of the method using the FRAX score was 86.3% and did not differ from that (85.1%) when detecting osteoporosis based on the ISCD recommendations ($p=0.07$). The FRAX method demonstrated higher specificity when compared with the ISCD recommendations approach (43.4% and

31.9%, respectively, $p=0.002$) and accuracy (55.4% for FRAX and 42.2% for ISCD recommendations, $p=0.001$). The use of FRAX reduced the cost of diagnosing 1 case of high-risk fractures by 1.9 times compared to the use of the ISCD recommendations.

Conclusion: So, when comparing the diagnostic value of methods for identifying patients with a high risk of fractures, it seems appropriate to use the FRAX questionnaire. With sensitivity indicators comparable to the ISCD recommendations, this method is characterized by higher specificity and accuracy, which minimizes the cost of diagnosing a high risk of fractures.

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COVID-19 AND CHRONIC INFLAMMATORY RHEUMATISM: RESULTS OF A SINGLE CENTER STUDY

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Objective to describe clinical and therapeutic characteristics of patients with chronic inflammatory rheumatism (CIR) contracting COVID-19

Methods: It is a single center observational study during May 2020- April 2021. We study the demographic data, body mass index (BMI), comorbidities, disease activity, DAS28 for rheumatoid arthritis (RA) and ASDAS for spondyloarthritis (SpA). We compare the disease activity before and after COVID-19.

Results: 43 patients with CIR and infected by the coronavirus were collected, 58, 14% were female. 48, 83% had RA and 51, 16% had SpA, (ankylosing spondyloarthritis 39, 53%, psoriatic arthritis 6, 97% and enteric rheumatism 4, 65%). The mean age was 49, 41 ± 12 , 25 years (30- 76 years), the mean BMI was 27, 93 ± 5.54 kg / m². 81, 39% of patients had at least one comorbidity, the most frequent was hypertension in 34, 88%. 74, 41% patients were on bDMARDs and 51, 16% were on csDMARDs alone or combined with bDMARDs. 30, 23% were on oral glucocorticoids, the medium dose was 5,76mg/ day of prednisone. The diagnosis of COVID19 was made with PCR, serological testing and / or chest CT. 2 patients had COVID19 after CD 20 inhibitor and one of them had a pulmonary embolism. No patient was transferred to intensive care unit and no deaths were noted. The mean DAS28 was 3,66 and the mean ASDAS was 2,68. The disease activity before COVID 19 was low compared to activity after COVID-19 ($p=0, 03$ for SpA, $p=0, 02$ for RA)

Conclusion: Through this study, we find that patients were overweight, comorbidities were frequent and disease activity was low before contracting COVID-19.

No conflicts of interest