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OC11

MULTIDIMENSIONAL PROGNOSTIC INDEX AND THE RISK OF FRACTURES: AN 8-YEAR LONGITUDINAL COHORT STUDY IN THE OSTEOARTHRITIS INITIATIVE

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Background: Fractures increase risk for disability and poor quality of life in older people. Frailty may be associated with higher fracture risk, but limited research has been carried out using a multidimensional approach to frailty assessment and diagnosis. The present research aimed to investigate whether the multidimensional prognostic index (MPI), based on comprehensive geriatric assessment (CGA), is associated with the risk of fractures in the Osteoarthritis Initiative (OAI) study. **Methods:** Community-dwellers affected by knee OA or at high risk for this condition were followed-up for 8 years. A standardized CGA including information on functional, nutritional, mood, comorbidities, medications, quality of life and co-habitation status was used to calculate the MPI. Fractures were diagnosed using self-reported information. Cox's regression analysis was carried out and results are reported as hazard ratios (HRs), with their 95% confidence intervals (CIs), adjusted for potential confounders.

Results: The sample consisted of 4,024 individuals (mean age 61.0 years, females = 59.0%). People with incident fractures had a significant higher MPI baseline value than those without (0.42 ± 0.18 vs. 0.40 ± 0.17). After adjusting for eight potential confounders, people with an MPI over 0.66 (HR = 1.71; 95%CI: 1.29–2.28) experienced a higher risk of fractures. An increase in 0.10 point in MPI score corresponded to an increase in fracture risk of 6% (HR = 1.06; 95%CI: 1.01–1.11). Higher MPI values were also associated with a higher risk of non-vertebral clinical fractures.

Conclusion: Higher MPI values at baseline were associated with an increased risk of fractures, reinforcing the importance of CGA in predicting fractures in older people.

OC12

THE PREVALENCE OF COMMUNITY-DWELLING OLDER ADULTS AT HIGH FRACTURE RISK WHO ARE NOT TAKING OSTEOPOROSIS MEDICATIONS: RESULTS FROM THE CANADIAN LONGITUDINAL STUDY ON AGING (CLSA)

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Objective: There is an established osteoporosis care gap, where individuals who have had a fracture do not receive subsequent treatment. Care gap studies have focused on the post-fracture context, and we know very little about whether individuals with other fracture risk factors are receiving treatment. The purpose of our study was to estimate the prevalence of community dwelling older adults at high fracture risk who are not taking osteoporosis medication using the Canadian Longitudinal Study on Aging (CLSA).¹

Material and methods: We included CLSA participants who completed the baseline (2015) comprehensive interview and had dual-energy X-ray absorptiometry (DXA) (N = 28,781). We describe the age- and sex- stratified proportion and prevalence of people at high fracture risk (FRAX® major osteoporotic fracture probability > 20%) and not taking an osteoporosis medication. Osteoporosis medications were defined using the Public Health Agency of Canada standards for osteoporosis surveillance and identified via drug identification numbers.² Sampling weights, as defined by the CLSA, were applied.¹

Results: The mean age of participants was 70.0 (SD 10.3). Overall, 6.2% were at high fracture risk. Of people who were at high risk, 96.6% of men and 79.8% of women were not taking an osteoporosis medication. This proportion decreased with age, for both men (45–54 years: 100%; 55–64 years: 98.9%; 65–74 years: 96.7%; 75+ years: 91.2%) and women (45–54 years: 96.4%; 55–64 years: 86.2%; 65–74 years: 82.7%; 75+ years: 74.0%) but was higher for men at all ages. The prevalence of people at high fracture risk and not taking an osteoporosis medication per 1000 persons increased with age for both men (45–54 years: 10.1; 55–64 years: 19.8; 65–74 years: 20.8; 75+ years: 17.8) and women (45–54 years: 13.2; 55–64 years: 34.9; 65–74 years: 64.7; 75+ years: 153.2) and was highest for women aged 75 years or older.

Conclusions: Our study demonstrates that most community-dwelling older adults at high fracture risk are not receiving osteoporosis medication, particularly men. This presents an opportunity for improved primary fracture prevention in the community.

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Disclosures

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OC13

PATIENT'S PREFERENCES FOR LIFESTYLE CHANGES IN OSTEOPOROTIC FRACTURE PREVENTION: A CROSS-EUROPEAN DISCRETE-CHOICE EXPERIMENT

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Objective: Healthy lifestyle habits are recommended for preventing osteoporotic fracture, alongside drug therapy. In this study, we aimed to