them, 20 patients were followed for lumbar spinal osteoarthritis, 15 for cervical spinal osteoarthritis and 9 for knee osteoarthritis. Thirty patients with CSI score ≥40 had 2 or more joints affected. The DN4 score was ≥4 in only 9 patients; testifying neuropathic pain. The interaction between CSI score and the VAS was significant, high VAS had central sensitization. Moreover we have found that the CSI score was significantly associated with the duration of progression of osteoarthritis (p-value=0.001); patients with the longest duration had the highest CSI score. It was also associated with the number of joints affected (p-value=0.001). The quality of life was associated with the central sensitization; patients having nociplastic pain had the lowest SF12 scores. However, there was no interaction between the CSI score and the osteoarthritis treatment.

Conclusion: In persons with osteoarthritis affecting different joints, any type of pain may exist. The central sensitization; indicator of nociplastic pain is not uncommon. It is associated with the number of joints affected, and the duration of osteoarthritis' progression. Our management of the OA must considerate these characteristics in order to relieve the patient's pain, improve his quality of life and prevent disability.

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OSTEOARTHRITIS AMONG HYPERTENSIVE PATIENTS IN A TUNISIAN POPULATION

G. H. Nahdi[1], F. Arfaoui[2], H. Ajlani[2]

[1]Faculty of Medicine of Tunis, Tunis, [2]Regional Hospital of Ben Arous, Ben Arous, Tunisia

High blood pressure may interfere with the pathogenesis of osteoarthritis (OA) since the final pathway of OA is perfusion abnormality of the synovium, articular cartilage and subchondral bone. That presupposes that high blood pressure as a vascular disease can change the OA course. This study was undertaken to assess the clinical and functional characteristics of osteoarthritis in hypertensive patients consulting in a rheumatology unit in Tunisia. A total of 101 patients with osteoarthritis were included. Thirty-three (28 females, 5 males) had high blood pressure (HBP), 68 had not and were taken as controls. All participants had completed preliminary questionnaires, clinical examination and an X-ray exam. Scores were used for pain (visual analog scale VAS, central sensitization index CSI) and for the quality of life (SF-12).

The mean age of participants was 57.56 y [±13 SD]. The frequency of diabetes was 57.7% in HBP compared with 9% in controls. Forty-five percent (45%) of the HBP group and 55% of controls were workers. Hypertensive patients had higher VAS scores (VAS average=6.7±2.14) than the controls (VAS average=4.8±3.3). The prevalence of knee OA was higher in hypertensive patients than in controls with 54.5% and 30% respectively. The central sensitization was found in 75% of both groups' patients. The hypertensive patients with OA had lower work ability index with poor work ability in 15% and moderate work ability 45% than controls with poor work ability in 10%. The quality of life was bad in HBP patients. All patients were under medication. There were significant associations of high blood pressure and knee osteoarthritis, VAS score, SF-12 (p=0.026, p=0.004 and p=0.016 respectively). High blood pressure is prevalent in patients with OA, especially knee OA and associated with worse pain, work ability score and impaired quality of life. Patients attending rheumatology unit for OA should have their BP taken, and those with known high blood pressure should have the co morbidity under control and well treated.

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SAFETY OF ANTI-OSTEOARTHRITIS MEDICATIONS: PRELIMINARY FINDINGS FROM A SYSTEMATIC REVIEW OF POST-MARKETING SAFETY SURVEILLANCE STUDIES

G. Honvo[1], L. Lengelé[2], J.-Y. Reginster[1,3,4], O. Bruyère[1,3]

[1]Division of Public Health, Epidemiology and Health Economics, Univ. of Liège, Liège, Belgium, [2]Metabolism and Nutrition Research Group, Louvain Drug Research Institute, UCLouvain, Université Catholique de Louvain, Sint-Lambrechts-Woluwe, Belgium, [3]World Health Organization (WHO) Collaborating Center for Epidemiology of Musculoskeletal Health and Ageing, Univ. of Liège, Liège, Belgium, [4]King Saud University (KSU), College of Science, Riyadh, Saudi Arabia

Objective: In 2019, we published a series of meta-analyses reassessing the safety of antiosteoarthritis (OA) drugs, using mainly data from full safety reports. The current systematic review (SR) intends to provide complementary insights on the safety of anti-OA medications, now using evidence from post-marketing safety surveillance studies.

Methods: This study followed the Cochrane methodology for SRs of interventions. Four bibliographic databases were comprehensively searched: Medline, CENTRAL, Scopus and TOXLINE. The outcomes of this review were any adverse events (AEs), or any safety issues reported in the included studies.

Results: Fifty-three (53) studies were retrieved, which assessed various anti-OA medications including non-steroidal anti-inflammatory drugs (NSAIDs, 22 studies), intra-articular hyaluronic acid (IAHA, 16 studies), symptomatic slow-acting drugs for osteoarthritis (SYSADOAs, 5 studies), Opioids (4 studies), Corticosteroid injections (4 studies), Nutritional supplements and herbal mixtures (2 studies). Most of these studies were cohort studies or case reports. The most common AEs reported by drugs were: Meloxicam (Gastrointestinal [GI] AEs), Celecoxib (Cardiovascular AEs), Nimesulide (GI, nervous system AEs), and Flurbiprofen (small increase in serum creatinine); other studies (1 per drug) reported mainly GI AEs with Piroxicam, Naproxen, Indoprofen, Sulindac, Etodolac, Fenbufen, Imidazole salicylate, Flavocoxid, and multiple NSAIDs; there was a case report of specific AEs with Etoricoxib (toxic epidermal necrolysis), Ibuprofen (delayed blood clotting with concomitant use of warfarin) and Diclofenac (spontaneous thigh hematoma). Other drugs and AEs were: IAHA (injection site pain); Diacerein (GI AEs and reddish urine); ASU-Piascledine (GI AEs - 1 study); Combinations of non-pharmaceutical grade Glucosamine and Chondroitin (allergic reactions, musculoskeletal and GI disorders – 2 studies); Opioids (hip frac-

ture associated with long-term tramadol use among older adults and a case of anaphylaxis complicated by loss of consciousness; a case of topical erythematous reaction with a buprenorphine transdermal patch; and various GI and nervous system disorders with hydrocodone); Corticosteroid injections (increased risk of OA progression; a case of rare vision disturbances and of a septic arthritis); Nutritional supplements and herbal mixtures (GI AEs).
Conclusion: This very first SR of post-marketing surveillance studies in OA confirms previous evidence from SRs of phase 3 clinical trials. Real-life safety surveillance of anti-OA medications should be strengthened with large cohort studies and complementary data from adverse drug reaction report registries.

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THE FIT-FRAILTY APP FOR ASSESSMENTS OF FRAILTY IN OLDER ADULTS: RELIABILITY IN A GERIATRIC CLINIC

G. Ioannidis[1], A. Relan[2], C. C. Kennedy[1], S. Park[1], P. Fisher[3], S. Vinson[3], J. D. Adachi[1], K. Rockwood[4], B. Egbujie[5], A. Papaioannou[1]

[1]McMaster Univ./Dept. of Medicine, Hamilton, [2]McMaster Univ./Dept. of Health Research Methodology, Hamilton, [3]St. Peter's Hospital, Hamilton, [4]Dalhousie Univ./Dept. of Medicine, Halifax, [5]Univ. of Waterloo/School of Public Health Sciences, Waterloo, Canada

Objective: Frailty has been described as the most problematic expression of population aging. Assessing frailty with existing tools may be too time-consuming and require additional equipment and staff-time. The Fit-Frailty App is a comprehensive measure of frailty utilizing fully guided, interactive smartphone/tablet technology. It was designed to be easily completed with older adults in clinical/research settings in ~15 min. Scoring is based on the well-validated Rockwood Frailty Index method and considers disease-related, physical, cognitive, mood, psychosocial, nutritional, and functional aspects. The full assessment includes interactive cognitive screening and physical performance measures. The primary aim is to conduct a reliability study of the Fit-Frailty App in older adults attending a geriatric clinic.
Methods: A convenience sample of 75 patients over the age of 65 y attending a geriatric clinic in Hamilton, ON were recruited. A clinic nurse administered the App with the patient during their clinic appointment and phone Fit-Frailty assessments were administered by a trainee 7 (follow-up 1) and 14 d (follow-up 2) after. The Fit-Frailty scores were categorized into severe frailty (>0.4), frail (0.25-0.40), and not frail (<0.25). Intraclass correlation coefficient (ICC) and 95%CI was calculated.
Results: The sample was 53% female, mean age 79.2 y (SD=7.03) and SMMSE 23.8 (SD=5.52). A total of 33% of participants were severely frail (25/75), 40% were frail (30/75), and 27% were not frail (20/75). The mean fit-frailty score was 0.33 (SD=0.13) at in-person assessment, 0.30 (SD=0.13) at phone follow-up 1 and 0.30 (SD=0.11) at phone follow-up 2. The mean time to complete the virtual assessment was 13.7 min (SD=8.4). The ICC between in-person and phone follow-up 1 was 0.840 (95%CI 0.830 – 0.853). The ICC between phone follow-up 1 and follow-up 2 was 0.911 (95%CI 0.911-0.912).
Conclusion: The Fit-Frailty App demonstrated excellent reliability when compared to in-person App assessment in measuring frailty in older adults attending a geriatric outpatient clinic. The Fit-Frailty App can assess home bound older adults, assist with triaging, and monitor changes over time.

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IMPORTANCE OF CALCIUM USE IN THE TREATMENT OF POSTMENOPAUSAL OSTEOPOROSIS

G. Kavaja[1], B. Kavaja[2], S. Tonuzi[1]

[1]Durres Regional Hospital, Durres, [2]Faculty of Medicine, Tirane, Albania

Objective: Osteoporosis is a progressive, systemic skeletal disorder characterized by reduced bone density. Patients with osteoporosis are at increased risk of fracture, although the condition remains asymptomatic until a fracture occurs. Oral bisphosphonates are generally considered the first-line treatment for patients with osteoporosis. It is important to ensure that patients with osteoporosis have adequate calcium and vitamin D levels for better results. We aimed to study the importance of using calcium as a supplement in bisphosphonate therapy in postmenopausal women with osteoporosis.
Methods: The study included 250 menopausal women diagnosed with osteoporosis. The diagnosis was made during the rheumatology visit and DXA examination. The first group included 150 female patients in menopause who were treated with oral bisphosphonate once a week and oral calcium 500 mg/d. The second group included 100 female patients in menopause who were treated with oral bisphosphonate once a week. In this group, the use of calcium was irregular due to the patients' compliance with it. The patients were followed for a period of 2 y by measuring the bone density every year.
Results: In the group of women in menopause treated with bisphosphonate and calcium, the prevention of bone loss was more significant compared to the second group where calcium intake was rare ($p<0.05$). Mean changes in bone density were [±SE], for the spine 0.56±0.94% vs. -1.06±0.88% and for the femoral neck 1.04±0.82% vs. -1.94±0.77%.
Conclusion: Treatment with bisphosphonate and calcium was more effective than treatment with bisphosphonate alone. The use of calcium slowed the bone loss in the femoral neck and spine in women in menopause.