OP52 Treating Osteoporosis In Postmenopausal Women With Denosumab (Prolia®): A Systematic Review And Network Meta-Analysis

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Introduction: It is estimated that osteoporosis affects over 200 million people globally. Postmenopausal women (PMW) have an increased risk of developing osteoporosis due to low estrogen levels. This study assessed the safety and effectiveness of denosumab (Prolia®) relative to placebo, selective estrogen receptor modulators (SERMs) (bazedoxifene and raloxifene), and bisphosphonates (alendronate, ibandronate, risedronate, and zoledronate) for the treatment of osteoporosis in PMW.
Methods: Systematic searches were conducted in three biomedical databases (PubMed, the Cochrane Library, and Embase) to identify randomized controlled trials (RCTs) of PMW with osteoporosis allocated to denosumab, placebo, bisphosphonates, or SERMs. The Cochrane Risk of Bias 2.0 tool was used to critically appraise included RCTs. Pairwise and Bayesian network meta-analyses were performed on the following predetermined outcomes: fractures (vertebral and nonvertebral); adverse events (AEs); mortality; serious AEs (SAEs); withdrawals due to AEs; bone mineral density (BMD); and AEs caused by denosumab discontinuation.
Results: The analyses included 12 RCTs (22 publications, 25,879 participants). Denosumab, ibandronate, alendronate, zoledronate, and risedronate produced a statistically significant improvement in total hip (TH) and lumbar-spine (LS) BMD, compared with placebo. Similarly, ibandronate, risedronate, and alendronate showed a statistically significant improvement in femoral neck (FN) BMD. Risedronate produced a statistically significant decrease in nonvertebral fractures (risk ratio 0.20, 95% confidence interval: 0.00, 0.97) relative to placebo. However, there were no significant differences between any of the interventions for rates of vertebral fractures, AEs, SAEs, withdrawals due to AEs, or mortality, compared with placebo.
None of the included trials reported evidence on AEs caused by denosumab discontinuation.
Conclusions: Denosumab was associated with significant improvements in both LS and TH BMD relative to placebo. Similarly, compared with placebo, denosumab was not associated with significant changes in nonvertebral or vertebral fractures. Denosumab was not associated with significant changes in safety outcomes relative to placebo. Given that some of the analyses suffered from statistical imprecision, these findings should be interpreted with caution. Regarding policy, continued funding of denosumab needs to be reviewed.

OP54 Experiences With Out-Of-Hospital Drug Treatment For Systemic Lupus Erythematosus: A Thematic Synthesis

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Introduction: Systemic lupus erythematosus (SLE) is a chronic autoimmune disease that affects quality of life and sometimes requires the use of multiple drugs. Therefore, it is relevant to address the experiences of patients, family members, and caregivers in relation to out-of-hospital SLE drug treatment. This paper presents the results of a pilot project of a Qualitative Evidence Synthesis (QES) conducted by the National Committee for Health Technology Incorporation (Conitec) in the Brazilian public health system.
Methods: For this thematic synthesis, a structured search was conducted in the MEDLINE, CINAHL, and LILACS databases. Seventeen articles were included, and their quality was evaluated using the Critical Appraisal Skills Program criteria. Article content, which was extracted into a spreadsheet adapted from JBI SUMARI, underwent thematic content analysis. Confidence in the findings was evaluated using the GRADE Confidence in the Evidence from Reviews of Qualitative Research tool.
Results: Fifteen findings related to three central themes: self-image and appearance; SLE as a chronic disease (disease oscillation, recurrence of symptoms, fear of organ damage, expectation of cure or modification of the disease course, and frequency of medical appointments); and experience with drug therapy (belief in the need for drugs, skepticism, chronicity of treatment, financial difficulty, adverse effects as obstacles to adherence and a source of suffering, efficacy/effectiveness, large quantity and frequency of drugs, and multiple therapeutic attempts).
Conclusions: The findings suggest that patients, family members, and caregivers have an ambivalent relationship with drug treatment. Even though they believe in the effectiveness of the drugs, they also distrust the need to keep using them, especially when SLE is controlled. The improvement of cosmetic manifestations and adverse effects also seem to be important outcomes. Furthermore, the high occurrence of adverse effects and the daily use of many drugs can make treatment adherence harder. In any case, there is an expectation of cure or more significant impact on the course of the disease through pharmacotherapy.

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