BISPHOSPHONATE THERAPY IN OSTEOPOROSIS: AN ANALYSIS FOCUSING ON DRUG CLAIMS BY SENIORS 2001 TO 2007
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OBJECTIVES: Bisphosphonates are effective in reducing the risk of fractures and are used to prevent and treat osteoporosis. Between 2000 and 2007, new bisphosphonate chemicals and formulations were introduced into Canada, and new evidence and practice guidelines emerged. This analysis provides insight into bisphosphonate use among seniors during this time period. METHODS: Claims level data from the National Prescription Drug Utilization Information System (NPDUIS) Database were analyzed for seniors on public drug programs in six Canadian provinces between 2001–2002 and 2006–2007. The analysis looked at trends in bisphosphonate use by age and sex, by chemical, and by formulation (daily and weekly therapy). The analysis also focused on the medication possession ratio (MPR) for bisphosphonate users, a surrogate measure for compliance with therapy. RESULTS: The age–sex standardized rate of bisphosphonate use across all provinces increased from 8.9% in 2001–2002 to 12.9% in 2006–2007. The rate of use among females (20.4%) was over six times higher than the rate of use among males (3.3%). In 2006–2007, etidronate had the highest rate of use, at 5.9%, followed by etidronate at 4.9% and risedronate at 2.9%. There was a significant shift from the use of daily to the use of weekly therapy. The rate of use of weekly therapy increased from 0.1% to 8.4%, while use of daily therapy dropped by 24.1% to 12.9%. The rate of use, at 5.9%, followed by etidronate at 4.9% and risedronate at 2.9%. There was a significant shift from the use of daily to the use of weekly therapy. The rate of use of weekly therapy dropped from 0.1% to 8.4%, while use of daily therapy dropped from 9.3% to 5.3%. The surrogate measure for compliance showed little difference between patients on daily and weekly therapy. CONCLUSIONS: This analysis provides insight into the introduction of new chemicals and dosage formulations that affected bisphosphonate use among seniors between 2001–2002 and 2006–2007. There was a significant shift from the use of new chemicals and weekly therapies. There was little difference in compliance between daily and weekly bisphosphonate users.

UTILISATION OF NONSTEROIDAL ANTI-INFLAMMATORY DRUGS IN QUEBEC, CANADA: IS THERE A CHANGE IN THE PATIENT RISK PROFILE AFTER THE WITHDRAWAL OF ROFECOXIB?
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OBJECTIVES: Traditional nonsteroidal anti-inflammatory drug (tNSAID) utilisation has recently increased considerably in the elderly in spite of their higher gastrointestinal (GI) toxicity and an increasing body of evidence pointing to similar cardiovascular (CV) safety compared to celecoxib. The objective is to describe the profile of patients who used celecoxib and tNSAIDs between April 1, 2003 and March 31, 2007 (post-rofecoxib withdrawal period) versus April 2, 2002 and March 31, 2007 (pre-rofecoxib withdrawal period) in Quebec, Canada. METHODS: Data were obtained from the physician and medication claims databases of the Quebec Health Insurance Agency. All patients 50 years of age and older who used celecoxib or tNSAIDs during the study periods were included. Patients were categorized by GI, CV, congestive heart failure (CHF), and renal risk factors and four risk categories were considered (low, moderate, high, and very high) in each condition. RESULTS: The numbers of patients on celecoxib were 145,596 and 178,714 in the post- vs. pre-period, while those on tNSAIDs were 249,433 and 120,809, respectively. Logistic regression models revealed that the risk of celecoxib vs. tNSAIDs were more than double to have higher GI risk levels in both periods (post-period vs. low risk): very high 1.79 (95%CI: 1.63, 1.97), high 1.76 (1.71, 1.81) and moderate 1.30 (1.27, 1.33). While users of celecoxib had higher CV risk levels in the pre-period compared to tNSAIDs, their very high CV risk level in the post-period was lower (post-period vs. low risk): very high 0.85 (0.81, 0.89), high 1.13 (1.10, 1.16) and moderate 1.15 (1.12, 1.17)). In both periods, the impact of CHF and renal risks on the choice of celecoxib vs. tNSAIDs appears to be less important. CONCLUSIONS: Currently, patients at very high CV risk seem to be less likely to receive celecoxib vs. tNSAIDs, while those with GI risk factors seem more likely to receive celecoxib.