



PRESS RELEASE

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NEW RESEARCH QUESTIONS PREVIOUS LINK BETWEEN DIABETES DRUGS AND BONE FRACTURES

Sodium glucose transport-2 inhibitors do not appear to increase fracture risk, even in older adults with moderate kidney dysfunction.

Highlights

- Although clinical trials have linked diabetes medications called sodium glucose transport-2 inhibitors to higher bone fracture risks, a large study found no additional risks when the medications were compared with diabetes drugs not associated with fractures.
- The findings applied to older adults with normal kidney function as well as to those with mild or moderate kidney disease.

Washington, DC (May 26, 2022) — Sodium glucose transport-2 (SGLT-2) inhibitors, which reduce glucose reabsorption by the kidneys, can help control blood sugar levels and protect kidney health in patients with diabetic kidney disease; however, some large clinical trials have linked the medications to a higher risk of bone fractures. In a recent study published in *CJASN*, SGLT-2 inhibitors were not associated with a higher risk of fractures when compared with another diabetes medication, regardless of patients' kidney function.

The study, which was conducted by Andrea Cowan, MD (London Health Sciences Centre) and her colleagues, compared fracture rates in adults aged 66 years or older who were prescribed SGLT-2 inhibitors vs. those prescribed a different diabetes medication—called dipeptidyl peptidase (DPP-4) inhibitors—that have not been linked to fractures. The analysis included 38,994 new users of an SGLT2 inhibitor and 37,449 new users of a DPP-4 inhibitor in Ontario, Canada. The study excluded individuals with severely decreased kidney function.

Overall, there were 342 fractures at 180 days and 689 fractures at 365 days. There was no difference in fracture risk between individuals prescribed an SGLT-2 inhibitor and those prescribed a DPP-4 inhibitor—both in the whole group and in those with decreased kidney function, who already face an elevated risk of experiencing fractures.

“This study re-assures patients and doctors that SGLT-2 inhibitors are not associated with an increased risk of fracture in patients with chronic kidney disease,” said Dr. Cowan.

An accompanying editorial notes that the study “adds to the growing body of evidence related to the safety of SGLT2 inhibitors, however it should encourage continued basic and clinical studies to determine with more certainty their potential risk of fractures, especially in individuals with more advanced chronic kidney disease.”

Study authors include Andrea Cowan, MD, Nivethika Jeykumar, MSc, Yuguang Kang, MSc, MD, Stephanie Dixon, PhD, Amit Garg, MD, MSc, PhD, Kyla Naylor, Matthew Weir, MD, MSc, and Kristin Clemens, MD, Msc.

Disclosures: This study was supported by ICES, which is funded by an annual grant from the Ontario Ministry of Health (MOH) and the Ministry of Long-Term Care (MLTC). The research was done at the ICES Western facility with partners which include the Academic Medical Organization of Southwestern Ontario (AMOSO), the Schulich School of Medicine and Dentistry (SSMD), Western University, and the Lawson Health Research Institute (LHRI). Dr. Andrea Cowan was supported by Physicians Services Incorporated, LHRI, SSMD and the Division of Nephrology. Parts of this material are based on data and information compiled and provided by Ontario Ministry of Health (MOH). The analyses, conclusions, opinions and statements expressed herein are solely those of the authors and do not reflect those of the funding or data sources; no endorsement is intended or should be inferred.

The article, titled “Fracture Risk of Sodium-Glucose Cotransporter-2 Inhibitors in Chronic Kidney Disease,” will appear online at <http://cjasn.asnjournals.org/> on May 26, 2022, doi: 10.2215/CJN.16171221.

The editorial, titled “Safety of SGLT2 Inhibitors in CKD: Walking the Fine Line,” will appear online at <http://cjasn.asnjournals.org/> on May 26, 2022, doi: 10.2215/CJN.04900422.

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