SEDATIVE DRUG IN COMBINATION WITH OPIOIDS MAY BE ESPECIALLY DANGEROUS

Study links benzodiazepines plus opioids to higher risk of early death in patients with kidney failure.

Highlights

- In an analysis of information on US adults initiating hemodialysis, 16% of patients were dispensed a short-acting benzodiazepine, and approximately one-quarter of these patients were also dispensed opioids.
- Among patients with an opioid prescription, being dispensed a short-acting benzodiazepine had a 1.9-fold higher risk of dying over a median follow-up of 16 months compared with patients without a short-acting benzodiazepine.

Washington, DC (May 26, 2020) — Results from a study of adults with kidney failure suggest that taking both short-acting benzodiazepines and opioids may put patients at an especially high risk of dying prematurely. The findings appear in an upcoming issue of *CJASN*.

Increasing use of opioids in recent years has led to rising numbers of deaths and hospitalizations due to overdoses. In light of this opioid epidemic, it is important to understand whether other medications interact with opioids to elevate risks for patients. A team led by Mara McAdams-DeMarco, PhD (Johns Hopkins Medical Institutions) looked to see if such an interaction exists for benzodiazepines (also considered tranquilizers or sedatives), which are some of the most commonly prescribed medications in the United States.

The study included 69,368 US adults with kidney failure who initiated hemodialysis in 2013 or 2014. Many patients with kidney failure have physical and psychiatric conditions that are treated with benzodiazepines, and they are also 3-times more likely to be prescribed opioids than the general population. “We sought to quantify the synergistic impact of benzodiazepines and opioids on mortality among patients initiating hemodialysis,” said Dr. McAdams-DeMarco.

During a median follow-up of 16 months, 15,175 patients (30%) died. Medicare claims data revealed the following:
Within 1 year of hemodialysis initiation, 10,854 patients (16%) were dispensed a short-acting benzodiazepine and 3,262 patients (5%) were dispensed a long-acting benzodiazepine.

Among those who were dispensed a benzodiazepine, co-dispensing of opioids and short-acting benzodiazepines occurred in 3,819 (26%) patients and co-dispensing of opioids and long-acting benzodiazepines occurred in 1,238 (8%) patients.

Patients with an opioid prescription were 1.66-fold more likely to be subsequently dispensed a short-acting benzodiazepine and 1.11-fold more likely to be subsequently dispensed a long-acting benzodiazepine.

Patients dispensed a short-acting benzodiazepine were at a 1.45-fold higher risk of dying during follow-up compared with those without a short-acting benzodiazepine; among those with opioid co-dispensing, the risk was 1.90-fold higher.

In contrast, long-acting benzodiazepine dispensing was associated with a 16% lower risk of dying compared with no dispensing of long-acting benzodiazepine; there was no differential risk by opioid dispensing.

“The potential risks associated with short-acting benzodiazepines should always be weighed against their therapeutic benefit and patients undergoing hemodialysis who are currently undergoing treatment with short-acting benzodiazepines should consider other treatments when clinically appropriate,” the authors wrote. “Furthermore, providers caring for patients undergoing hemodialysis should be given the tools needed to implement a collaborative, team-based approach for deprescribing of short-acting benzodiazepines, particularly for patients who are likely to use opioids.”

An accompanying Patient Voice editorial provides the perspective of a woman who describes herself as a kidney patient, a chronic pain patient, and an allied healthcare provider. “I am encouraged to see the crisis of palliative care being addressed in the kidney population,” she wrote.

Study co-authors include Abimereki D. Muzaale, MD, MPH, Matthew Daubresse, MHS, Sunjae Bae, KMD, MPH, Nadia M. Chu, PhD, MPH, Krista L. Lentine, MD, PhD, and Dorry L. Segev, MD, PhD.

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