Seizure risk of anti-shivering agent meperidine greatly overstated

November 23 2015

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Meperidine, an opioid analgesic commonly used to control shivering in accidental or therapeutic hypothermia, has been linked to increased seizure risk, but a new study finds little published evidence to support this risk. While use of meperidine for pain relief has declined, its role as an effective anti-shivering agent should continue to be explored, conclude the authors of the study "Seizures and Meperidine: Overstated and Underutilized," published in Therapeutic Hypothermia and Temperature Management.

Konrad Schlick, MD and Patrick Lyden, MD, Cedars-Sinai Medical Center, Los Angeles, CA, and Thomas Hemmen, MD, PhD, University of California San Diego, reviewed 45 years of medical literature and found relatively few cases of meperidine-associated seizures. In many of the cases, coexisting illnesses, conditions, or other factors could have contributed to or explained the increased risk of seizures.

"This literature review that reports limited evidence to indicate that the anti-shivering agent meperidine increases seizure activity should be very important to the field of Therapeutic Hypothermia and Temperature Management," says W. Dalton Dietrich, PhD, Editor-in-Chief and Kinetic Concepts Distinguished Chair in Neurosurgery, Professor of Neurological Surgery, Neurology and Cell Biology, University of Miami Leonard M. Miller School of Medicine.

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