

Increasing Misuse and Abuse of Gabapentin and Pregabalin

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Background: Abuse of the prescription drugs gabapentin and pregabalin have increased in recent years, with severe medical outcomes and deaths 74 *J. Med. Toxicol.* (2019) 15:53–107 reported. Prescribing of these agents has increased significantly, as they are often used as alternatives to opioid analgesics.

Research Hypothesis: There would be an increase in the number and severity of gabapentin and pregabalin cases that received medical toxicology consultation.

Methods: This was an 8-year multicenter analysis from a prospectively collected cohort utilizing the Toxicology Investigators Consortium (ToxIC) registry, which collects data pertaining to medical toxicology consultation. More detailed clinical information was collected starting in 2014; therefore, some data are only available for these years. Cases were included if gabapentin or pregabalin misuse or abuse was reported. Clinical and demographic data were evaluated including age, sex, coingestants, clinical manifestations, treatment, and outcome.

Results: From January 2010 to July 2017, there were 515 gabapentin and 107 pregabalin adult misuse/abuse cases reported. There were an additional 39 gabapentin and 6 pregabalin misuse/abuse cases reported in adolescents (13–18 years). During this time, the prevalence of gabapentinoid cases as a percentage of all cases logged in ToxIC's registry doubled, from 1.4% to 2.7%. There were no differences in sex and most patients were middle aged (mean age 50 years gabapentin vs. 46 pregabalin). There were six gabapentin and one pregabalin-related deaths, all of which involved coingestants. The most common coingestants were sedative-hypnotics/muscle relaxants, opioids, and anti-depressants for both gabapentin and pregabalin. From 2014 to 2017, the most common clinical manifestation was central nervous system depression (50% gabapentin, 100% pregabalin), followed by hyperreflexia/myoclonus (30%, 67%) and delirium (27%, 0%).

Conclusions: There was an increase in cases of gabapentin and pregabalin misuse and abuse, which parallels recent prescribing trends. Healthcare providers must be cognizant of these medications' abuse potential as we attempt to curb opioid prescribing.