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Quetiapine poisoning in Taiwan: A poison center-based study

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Objective

This study was carried out to better understand the demographic and clinical characteristics of quetiapine poisoning cases reported to the Taiwan Poison Control Center (PCC-Taiwan), Taiwan.

Methods

This was a retrospective review of all cases of quetiapine poisoning reported to PCC-Taiwan between 2002 and 2021. Data from patients with relevant poisoning were reviewed and abstracted. We then analyzed the baseline and clinical characteristics of the patients.

Results

There were 175 cases of quetiapine poisoning reported to PCC-Taiwan during the study period. Males and females were involved in 45 (26%) and 130 cases (74%), respectively. The median age was 35 years (ranging from 1 year to 90 years). Among 88% of the poisoned cases, the intent of exposure was intentional. Half (50%) of the patients presented with co-ingestion of one or more various psychoactive medications. In terms of severity, one of the 175 (0.6%) patients died, 9.7% had severe effects, 44% had moderate effects, 41.7% had mild toxicity, and 4% were asymptomatic. The clinical features of severe toxicity were hypotension in 20 (11%) and seizures in 8 (5%) patients. ECG was available in 60 (34%) of the patients; 26 (43%) and 15 (25%) of those patients had sinus tachycardia and prolongation of QTc interval as the key finding, respectively. Except for a patient who died due to pulseless electrical activity, no other patients had life-threatening cardiac arrhythmias. Creatine kinase level was elevated in 17 (10%) of the patients and urinary alkalinization along with intravenous hydration was considered in 2 of them. Other special treatments considered were flumazenil in 8 patients, intravenous lipid emulsion therapy in 2 patients, and naloxone in 1 patient.

Conclusion

Most of the cases of quetiapine poisoning in this study were of mild to moderate poisoning, and the overall case fatality rate was less than 1%. As there is no specific antidote, early identification of various complications and prompt supportive treatment are the cornerstone in the management of quetiapine poisoning.