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146. Toxicity Following Antiemetic Ingestions Reported to the Toxicology Investigators Consortium Core Registry

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Background: There are a variety of medications used to treat nausea. Although antiemetics are not frequently implicated in overdose, several side effects may develop idiosyncratically or following large ingestion.

Hypothesis or Research Question: What are the demographics, clinical features, treatments, and outcomes of prochlorperazine, ondansetron, and metoclopramide ingestions reported to the American College of Medical Toxicology's Toxicology Investigators Consortium (ToxIC) Core Registry?

Methods: This was a review of prospectively collected de-identified patient information reported to the ToxIC core registry by medical toxicologists providing bedside care for poisoned patients between January 1, 2010 and December 31, 2024. Data regarding patient demographics, clinical features, antidote administration, other interventions, and outcomes were reviewed.

Results: There were 85 cases entered into ToxIC during the study period. Prochlorperazine was implicated in 58 (68.2%) cases, while ondansetron accounted for 14 (16.5%) exposures. Metoclopramide was ingested in 13 (15.3%) cases. The median patient age was 24 years, range 4 months – 74 years. Females accounted for 45 (52.9%) patients. The most common clinical feature following prochlorperazine ingestion was antimuscarnic toxicity, which was reported in 22 (37.9%) cases. Agitation was observed in 16 (27.6%) cases, while central nervous system depression was seen in 14 (24.1%) patients. One patient had both QRS widening and QT prolongation. Of the ondansetron cases, thirty-five (60.3%) patients received treatment. Benzodiazepines were administered to 18 (31%) patients. Physostigmine was used in seven (12.1%) cases. Endotracheal intubation and mechanical ventilation was performed on four (6.9%) patients. Central nervous system depression was observed in six (42.9%)

Conclusion: A variety of clinical features may develop antiemetic ingestions. Central nervous system depression is frequently reported. Prochlorperazine may cause antimuscarnic toxicity. Electrocardiographic abnormalities may be observed. Treatment may include antidotal therapy, general supportive care, and in severe cases, endotracheal intubation and mechanical ventilation.

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