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162. Gastrointestinal Decontamination: Trends from the ToxIC Case Registry, a Five-Year Review

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Background: Gastrointestinal (GI) decontamination following toxicologic exposures has largely fallen to the wayside over the past several decades. However, a variety of GI decontamination methods remain in use for some toxic exposures.

Research Question: For which toxicologic exposures was GI decontamination utilized over a five-year period in patients registered in the ToxIC Case Registry?

Methods: This retrospective database review using the ToxIC Case Registry from 2014 to 2019, examined the overall rate and specific methods of GI decontamination as they relate to patient age, toxicologic exposure, presenting signs and symptoms, and need for additional treatment.

Results: The overall utilization rate for GI decontamination during the study period was 3.34%. Activated charcoal was the most common method of GI decontamination (3.04%) in all age groups, and was most commonly used for analgesic, cardiovascular, and antidepressant medication exposures. Less commonly employed methods were whole-bowel irrigation (0.38%) and gastric lavage (0.13%). Rates of GI decontamination in pediatric patients less than seven years of age (4.21%) and between seven and 18 years of age (5.73%) were significantly higher than patients 18 years of age and older (2.78%; $p < 0.0001$). Over 15% of patients receiving all forms of GI decontamination presented with tachycardia (>140 BMP) and greater than 49% of patients had neurologic symptoms. Fourteen of the 1593 patients receiving GI decontamination died.

Conclusion: Gastrointestinal decontamination is used more commonly in pediatric patients than adult patients. Further study of certain toxicologic exposures receiving GI decontamination, specifically activated charcoal, is needed to determine the presence or absence of improved patient outcomes.