50. The ToxIC International Registry: Initial Glimpses from Medical Toxicology Consultation Services in Russia, Thailand, and Mexico

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Background: The international toxicology community has limited communication and collaboration mechanisms.

Research question: Is it feasible to develop an international registry of poisoned patients parallel to the American College of Medical Toxicology (ACMT) Toxicology Investigator’s Consortium (ToxIC) Registry, an internet-based, multicenter toxicosurveillance network active in the USA since 2010?

Methods: We identified international colleagues with an interest or need in developing a registry of poisoned patients via online surveys and interviews. A web-based data entry form was developed to capture anonymized demographic, clinical, and management details of patients seen in bedside consults by international ACMT members. All entries was de-identified locally prior to registry enrollment, with periodic feedback via email or videoconference encounters provided to address logistical issues.

Results: The International ToxIC Registry has been active since February 1, 2013. ToxIC Investigators in urban settings in Russia, Thailand, and Mexico entered a total of 235 cases involving 43 agents. One hundred ninety-six (83 %) patients presented with clinical signs of toxicity, while 39 were asymptomatic. The most common clinical presentations were confusion, CNS and respiratory depression, agitation/delirium, or anticholinergic toxidrome. GI decontamination was performed on 44 patients: 37 received gastric lavage and 10 received activated charcoal. Medical treatments, given to 55 patients, were benzodiazepines (44 patients), antipsychotics (11 patients), atropine (7 patients), as well as NAC, calcium, glucose, vasopressors, high-dose insulin euglycemic therapy, and intralipid (1 to 4 patients for each). The most common intoxicants (and number of cases) were synthetic cathinones (42), ethanol (30), antipsychotics (20), sedatives (19), carbon monoxide (12), cannabinoids (12), acid/corrosives (11), and opioids/heroin (6).

Conclusion: These initial data indicate that emerging drugs of abuse, prescription agents, and alcohol are well-represented intoxicants in urban toxicology practice settings worldwide. The increased use of gastric lavage over charcoal represents a trend which markedly differs from
the USA and warrants further research. Our experience suggests that an international, web-based registry of bedside medical toxicology consultations is feasible. This project can create opportunities for global collaborative research and education among toxicologists with the ultimate goal of improving the care of poisoned patients worldwide.