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199. Descriptive study of medical toxicology consultations at a teaching university hospital in Bangkok

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Objective: A medical toxicologist became available at our teaching hospital in 2012 then joined the Toxicology Investigator's Consortium (ToxIC) in August 2013. ToxIC is the American College of Medical Toxicology's research network mainly involved in the US healthcare setting. Our hospital is one of few outside the US in the network. Data collection in the ToxIC Registry can be useful in several ways such as research and resource management. Objectives were to describe toxicological cases seen at the bedside in a hospital in Bangkok and include their presentations and treatments provided.

Methods: Data on epidemiology, toxic substance type, venomous organism species, clinical presentation, laboratory results, and treatment provided were collected prospectively at the bedside and were entered into the database. The study period was 1 August 2013 to 31 March 2015.

Results: Annually, the hospital received approximately 80,000 Emergency Department visits. During the 20-month-study, 559 cases were registered in the toxicology logbook. This made our incidence of toxicological cases approximately 0.42%. Thirty-five of these cases were not recorded on ToxIC data sheets and not entered into the ToxIC registry. Data from 524 cases were included for further analysis. Of the 524 patients, 58% were male. The majority (59%) were between 19–65 years old, followed by 25% of cases who were aged 13–18 years. The primary reasons for the encounter were intentional pharmacological (41%), toxic animal (27%), and intentional non-pharmacological (12%) exposures. The major primary substance encounters were opioids (84 cases; 94% were tramadol). Of 143 toxic animal exposures, 52% and 21% involved snakes and centipedes, respectively. Regarding treatment, 11 cases underwent gastric lavage, 13 received single-dose activated charcoal, 10 received multiple-dose activated charcoal, and 1 underwent hemodialysis. The most common antidotes given were acetylcysteine (20 cases), thiamine (13 cases), naloxone (10 cases) and snake-antivenom (9 cases).

Conclusion: Intentional exposure was the most common reason for toxicology encounters. The major substance was tramadol which is widely available over-the-counter in Thailand. On the other hand, envenomation was also a major cause of toxicological visits at this hospital, even though Bangkok is the most urbanized city in the country and this could give us a unique opportunity for envenomation research in an urban setting. Gastric lavage was still done, but in a small number of patients. This information is crucial for resource management and plans for establishing a formal and sustainable medical toxicology service at this teaching hospital.