Oral Abstracts

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MUSHROOM POISONING IN THAILAND: A 3-YEAR RETROSPECTIVE REVIEW OF POISON CENTERS DATABASES

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Objectives: To review mushroom poisoning cases consulted to Siriraj Poison Control Center and Ramathibodi Poison Center from 1st January 2013 to 31st December 2015.

Methods: This is a retrospective review of poison center databases of Siriraj Poison Control Center and Ramathibodi Poison Center from 1st January 2013 to 31st December 2015. Case identification was achieved by electronic searching with the key word “mushroom” as well as hand searching through paper based records. Data abstraction included date of consultation, patients’ characteristics, clinical manifestations, investigation, treatments, final outcomes and mushroom identification.

Results: There were 1251 mushroom poisoning cases from 553 incidents with the cluster size up to 13 patients reported during the study period. Of these, 207 and 1044 cases were from Siriraj Poison Control Center and Ramathibodi Poison Center respectively. The mean age was 40.8 years(minimum 1, maximum 94, SD 19.6). Most patients were Thai(87.1%), male(52.0%), picked mushrooms from the wild(92.6%), and ingested wild mushroom for food(98.1%). Cases reported from May to October accounted for 88 percent of total cases. The majority of cases were from provinces in the northeast region(57.9%) and the north region(39.7%) of Thailand. Onset of gastrointestinal(GI) symptoms was less than 6 hours in 963 cases(77.0%). Most patients(89.4%) had at least one GI symptoms including abdominal pain, nausea, vomiting or diarrhea. Major clinical diagnosis included GI irritants(66.3%), cholinergic(11.3%), amatoxin(6.3%), and hallucinogenic(2.9%) mushroom poisonings. Mushrooms were identified in 24 cases demonstrating *Amanita spp., Rusulla spp., Inocybe spp., Clitocybe spp., and Macrolepiota spp.* In addition to supportive care, treatments included nasogastric lavage(25.0%), single dose(36.8%) or multiple dose(10.1%) activated charcoal, high dose penicillin(5.0%), Nacetylcysteine(8.1%)and silibinin(2.1%) administrations. There were 33 deaths(2.6%) from amatoxin poisoning including a 2-year old girl who underwent liver transplantation on hospital day 8, died on hospital day 20 due to multi-organ failure. Three pregnant patients were diagnosed with GI irritant mushroom poisoning, had full recovery. There were no reported adverse effects to their fetuses. Mushroom poisoning was listed as a reportable disease on the surveillance system of the Bureau of Epidemiology, Thai Ministry of Public Health, however only 40 cases(3.2%) were reported.

Conclusion: This study describes the pattern of mushroom poisoning in Thailand. The incidence and fatality ratio of mushroom poisoning is observed to be high compared with developed nations. It is hence recommended that we need to improve case prevention and management guidelines, and enhance our research into mushroom poisoning, in Thailand.