Poster Abstracts

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ACUTE PESTICIDE POISONING WITH ACETAMIPRID: A CASE REPORT

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Introduction : Acetamiprid is a relatively new neonicotinoid insecticide which acts as agonists at the postsynaptic nicotinic acetylcholine receptors. Because of its high selectivity for receptors in insects and poor permeability of the blood-brain barrier, Acetamiprid is believed to be of low toxicity to mammals. Cases of poisoning with Acetamiprid in humans are less reported. We describe a case of an elderly woman who presented to the emergency department with acute Acetamiprid poisoning.

Case report : A 77-year-old woman with a history of hypertension, coronary heart disease and parkinsonism ingested approximately 60 g of an insecticide formulation containing 20% Acetamiprid water-soluble powders in an attempted suicide. She experienced persistent vomiting, abdominal pain and muscle weakness immediately. Three hours later, she was transported to the emergency department. On arrival, she had clear consciousness and normal reactive pupils. Her vital signs were as follows: body temperature, 36.1°C; pulse, 59 beats/min.; respiratory rate, 18/min.; blood pressure, 182/90mmHg. The parameters of blood examination were within normal range. Her plain radiograph of the chest was normal and her electrocardiogram revealed first-degree atrioventricular block. She underwent treatment with gastric lavage and activated charcoal. She was then admitted to the ward and treated conservatively. Thereafter she recovered well and was discharged home.

Discussion : Acetamiprid, one of the members in the class of neonicotinoid insecticides, exhibits agonistic effects on the nicotinic acetylcholine receptors. The clinical features of neonicotinoid-poisoned patients vary between reports. The observed effects in non-severe poisoned patients include gastrointestinal symptoms and minor neurological presentations. In severely poisoned patients, respiratory, cardiovascular and some neurological symptoms such as coma or seizure may occur. There is no antidote for neonicotinoid poisoning. Decontamination and supportive treatment are sufficient for treating such patients. Because of the increasing application of neonicotinoid insecticides worldwide, clinical physicians should understand the clinical features and management of acute poisoning.