Acute phosphide poisoning related deaths reported at Toxicology Unit of Tanta Emergency University Hospital: A retrospective study

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Background: Acute phosphide poisoning represents a worldwide problem due to its associated morbidity and mortality.

Aim: To determine the magnitude, pattern, trend and possible risk factors in acute phosphide poisoning related deaths.

Patients & Methods: A retrospective study reviewed data from death cases of acute poisoning admitted to Toxicology Unit, Tanta Emergency University Hospital, from 1st of January 2009 to 31st December 2013. Poisoning was diagnosed by history taking and clinical examination. Recorded data included age, gender, residence, phosphide type, manner, pre-hospitalization interval, clinical examination, results of ante mortem laboratory investigations and all received treatments.

Results: 17 phosphide poisoned cases died during the study duration (13 with aluminum and 4 with zinc phosphides), most cases were young (61.54%), females (69.23%), suicidal, from Kom Hamada (53.85%). Most cases received inadequate or improper first aid treatment either at home or primary health care units. The majority of cases (61.54%) did not require mechanical ventilation and most of deaths occurred during the first 6 hours from admission.

Conclusion: Intentional phosphide poisoning, particularly aluminum phosphide, had the first rank as a cause of death in poisonings referred to Tanta Toxicology Control Unit. Governmental regulation to ban the use of phosphide-based pesticides and proper training of physicians at primary health units are advocated to decrease the phosphide poisoning associated mortality.

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