

Aluminium phosphide Poisoning in Bangladesh: Inhalational and Intentional.

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Objective: Aluminium phosphide (AP), a solid fumigant that produces phosphine gas, is widely used during grain preservation. The commonest mode of poisoning is ingestion due to easy availability in rural areas, whereas inhalational phosphine poisoning is relatively less reported. In this communication we report the first ever documented incidents of AP poisoning by oral ingestion and inhalation in Bangladesh. **Case series:** Seven workers developed unusual symptoms following an overnight sleep in a food warehouse where aluminum phosphide was used as pesticide and rodenticide. No protective gear was used. Important features include dizziness, nausea, vomiting, fatigue, hypotension, atrial fibrillation, nonspecific ST and T wave changes and hypokalaemia. One patient with atrial fibrillation and hypotension was given magnesium sulphate (IV 2gm stat) and dopamine. The AF reverted within one hour and BP subsequently stabilized. All other patients recovered with supportive treatment. Follow up revealed bradycardia in two and low systolic blood pressure in four of the victims. Another adult male patient presented with respiratory distress, oliguria and jaundice three days after ingestion of a single pellet with an intention of deliberate self harm. Laboratory investigations revealed hypernatremia, acidosis, haemolysis and thrombocytopenia. Brought specimen confirmed the offending agent. He developed multi organ failure and died 8 days later. **Conclusion:** Intoxication by AP is being increasingly reported in literature as occupational or nonoccupational incidents, some with fatal outcome. Aluminium phosphide poisoning should be kept in mind in patients presenting in an unusual setting. Strict adherence to occupational safety practices is necessary to avoid such poisonings.