MANAGEMENT OF ALUMINIUM PHOSPHIDE POISONING

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Abstract:
AIP is known as a suicide poison that can easily be bought and has no effective antidote. Phosphine gas primarily affects the heart, lungs, gastrointestinal tract, and kidneys. Poisoning signs and symptoms include nausea, vomiting, restlessness, abdominal pain, cardiac arrhythmias, pulmonary edema, cyanosis. Treatment includes early gastric lavage with potassium permanganate or a combination with coconut oil and sodium bicarbonate, administration of charcoal, and palliative care.

In this review we would discuss mainly about available therapies and management and evaluate the advantages and disadvantage of the therapies and comparison them to find best management. We read and check the other articles and reviews to find best management. We search in scinecdirect, pubmed, google, google scholar and clinical trial.gov to find available articles and guidelines.

The nature of this poison makes it a potential agent for chemical terrorists, and release of phosphine gas in an enclosed space would lead to respiratory toxicity, public chaos, and widespread contamination. Recognition of the characteristic garlic smell of phosphine gas should alert front line emergency staff to the possibility of AIP/phosphine exposure.

Current management is supportive; however, survival is unlikely if more than 1.5 g is ingested.

2.1 The case fatality ratio declined in the last decade due to improved intensive care. Strict implementation of nationwide pesticide regulation, including restricting the availability of poison, being aware of its toxicity and providing improved medical management in consultation with regional or national poison control centers could further reduce the mortality due to AIP toxicity as there is no antidote available presently.

Keyword: poisoning, aluminium phosphide