

## Deliberate Ingestion of Aluminum Phosphide Tablets as a Treatment for Dyspepsia

Sir,

We report a case of a 65-year gentleman presenting to the Emergency Department with ingestion of two tablets of wheat pill, commonly known as gas tablets in the rural areas of Khyber Pakhtunkhwa (KPK), Pakistan. The patient arrived 4 hours after taking the pills, when he developed symptoms of dizziness, vertigo, and vomiting. He was conscious and well oriented to time, person, and place but was haemodynamically unstable. On taking history, it was revealed that he had taken two tablets of the wheat pill as a treatment for chronic dyspepsia. He was using over-the-counter medications for this long-standing issue, and it was suggested to him by someone that he could get relief with gas tablets. On examination, his blood pressure was barely recordable, and his saturation was 91% on room air. He was taken to the intensive care unit but unfortunately could not recover and died.

In agricultural countries, Aluminum Phosphide (ALP) tablets or wheat pills are commonly available pesticides. Pakistan is an agricultural country, and pesticides (organophosphates and ALP) are the most frequently used agents for suicide.<sup>1</sup> When ALP is ingested, it releases a highly toxic phosphine gas, when it comes in contact with the humid environment of the stomach. At the cellular level, it inhibits mitochondrial function and forms hydroxyl radicals leading to refractory shock, metabolic acidosis, cardiac arrhythmia, kidney failure, and liver impairment. There is no available antidote, and the management is usually supportive. The lethal dose is 150–500 mg, and the mortality is as high as 70–100%.<sup>2</sup> There are rarely any cases in the literature of deliberate ingestion of ALP as a remedy for a medical condition and most of the cases are reported by young adults from rural background.<sup>2</sup>

ALP is commonly used for crop protection by farmers and agriculture workers. It is easily available and very cheap. There is a need to educate farm workers on safe handling of ALP to prevent accidental poisoning. Proper legislation is advised for strict control on the sale of ALP.

### COPMETING INTEREST:

The authors declared no competing interest.

### AUTHORS' CONTRIBUTION:

MMS: Drafting.

HS: Design.

AT: Final approval.

### REFERENCES

1. Safdar M, Afzal KI, Smith Z, Ali F, Zarif P, Baig ZF. Suicide by poisoning in Pakistan: Review of regional trends, toxicity and management of commonly used agents in the past three decades. *BJPsych Open* 2021; **7**(4):114. doi: 10.1192/bjo.2021.923.
2. Meena MC, Mittal S, Rani Y. Fatal aluminium phosphide poisoning. *Interdiscip Toxicol* 2015; **8**(2):65. doi: 10.1515/intox-2015-0010.

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