

Should ratol paste be banned?

Sir,

Ratol paste, a commonly used rodenticide in Indian houses contain 3% yellow phosphorus. Yellow phosphorus is a general protoplasmic poison causing multiorgan failure.^[1] Doses >1 mg/kg are almost invariably fatal.

Ratol paste poisoning is either suicidal or accidental. The clinical course of ratol paste poisoning is different from that of most other poisons. The patients are usually asymptomatic during the initial 72 h of ingestion, or they may have signs and symptoms of gastrointestinal irritation. After 72 h they develop deranged liver function, acute hepatic failure, coagulopathy. Central nervous system effects include changes in mental status like confusion, psychosis, hallucinations, and coma. Cardiac toxicity includes hypotension, tachycardia, arrhythmias, and cardiogenic shock. Some patients may develop acute tubular necrosis and acute renal failure.^[1-3] Because of the initial asymptomatic phase few patients do not reveal about ratol paste ingestion and present late to the hospital. Patients who present late after consumption of the lethal dose develops fulminant hepatic failure with mortality of 100%.^[2] In severe ingestions of ratol paste, patients do not have the initial asymptomatic stage, and they die due to shock and cardiopulmonary arrest in early stages itself.^[4]

There is no specific antidote for yellow phosphorus poisoning. Treatment is directed at removal of the poison and supportive therapy.^[1-3]

Aluminum phosphide, zinc phosphide are the other rodenticides available. They are mainly used in agricultural fields^[5] in contrast to ratol paste, which is used in houses. Also, ratol paste is commonly mistaken for toothpaste and consumed by children. And the product directions suggest that the paste be applied to bread to enable ingestion by rodents, thus making it appealing to children as well.^[1] Hence, accidental poisoning is more common with ratol paste.

This fatal poison is freely available over the counter in toxic doses at very cheaper prices.^[3]

Similar to any other poisoning, prevention strategies by restricting access to this poison, creating public awareness regarding the lethality of ratol paste and regulating the market sale of this compound should be helpful. However, this lethal ratol paste is easily available at cheaper costs and accidental poisoning is more common, especially among children. Hence, we call for a ban on market sales of ratol paste.

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