

TRANSFORMING TOXICOLOGY LANDSCAPE FOR SAFER AND SUSTAINABLE TOMORROW **POSTER PRESENTATIONS**

[ID-P#109] A Fatal Feast: Rodenticide Homicide Resulting in Multiorgan Failure – A Case Report

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Objective: This case report describes the clinical presentation, diagnostic findings, and forensic considerations of an elderly woman with rodenticide poisoning leading to multi-organ failure, emphasizing the diagnostic and management challenges.

Case Report: A 58-year-old woman, with no known comorbidities, presented with a four-day history of nausea, vomiting, and abdominal pain. The vomitus contained mainly food particles and was foul-smelling. Abdominal pain, localized to the upper abdomen, developed intermittently. Symptoms began after a meal four days prior. She was previously admitted to another hospital for two days and referred to our center due to deranged liver function tests and persistent symptoms. She had no history of fever, diarrhea, hematemesis, or bleeding. She lived with her husband and elder daughter. On examination, she appeared moderately built and nourished with icterus. Her vitals included BP of 100/72 mm Hg, HR of 86 bpm, and RR of 20 cycles/ min. She was drowsy, arousable to call. Laboratory findings revealed deranged liver function, renal impairment, and metabolic acidosis. She exhibited elevated AST (3,292 U/L) and ALT (3,059 U/L), and increased bilirubin levels (TB/DB 10.6/7.6). The PT INR (50.9/3.89) was highly elevated, indicating coagulopathy. Serum amylase (2,632) and lipase

(506) levels were markedly elevated. Based on clinical findings and suspicion from her husband, a diagnosis of rodenticide poisoning by homicide, leading to fulminant hepatic failure and acute kidney injury, was made, confirmed by police investigation. Google search history of the daughter played a crucial role in solving the case, aiding both doctors and police in clinching the diagnosis. In India, multiple pesticides and rodenticides with the same brand name but different chemical compositions can add to the diagnostic dilemma.

Conclusion: This case report highlights the clinical challenges in diagnosing and managing rodenticide poisoning, which can lead to rapid and severe multi- organ dysfunction. Despite aggressive interventions, the patient's condition deteriorated, resulting in cardiac arrest and death. Timely recognition and management of rodenticide poisoning are crucial for improving outcomes, emphasizing the need for early identification and intervention in toxic ingestions. The government should enforce strict regulations regarding the naming and sale of these products to prevent such issues.