[ID-P#018] Multi-organ damage due to Glufosinat ammonium poisoning

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Objectives: The objective of this case study is to elucidate the pathophysiological mechanisms and clinical management of multi-organ failure induced by Glufosinate Ammonium toxicity.

Methods: A 67-year-old female patient admitted to our toxicology unit with symptoms of emesis and altered mental status following ingestion of Glufosinate Ammonium and Metsulfuron Methyl in a suicide attempt. Immediate medical intervention included gastric lavage and administration of activated charcoal. Clinical data, laboratory results, and treatment interventions were meticulously recorded.

Results: Within 24 hours of admission, the patient deteriorated, manifesting coma, respiratory arrest, and bradycardia. Laboratory analysis revealed hyperammonemia while electrocardiogram findings showed sinus bradycardia. Mechanical ventilation was initiated, and after a seven-day intensive treatment regimen, the patient's condition stabilized, leading to successful extubation.

Discussion: Glufosinate Ammonium herbicide poisoning presents a complex clinical course, with a latent period followed by acute multi- organ dysfunction. Hyperammonemia and cardiac complications are notable features, requiring meticulous monitoring and supportive care. This case underscores the importance of understanding the pathophysiological mechanisms and implementing timely interventions to mitigate the adverse effects of Glufosinate Ammonium poisoning