METHANOL-INDUCED BILATERAL OPTIC NEUROPATHY: AN EVER-PRESENT CHALLENGE TO HEALTHCARE SYSTEM

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Methanol is a highly toxic alcohol that can cause severe metabolic acidosis, leading to acute multiple organ failures and even blindness. Despite being a serious health concern, methanol poisoning remains a challenging issue due to the lack of acute medicine setup, available resources, and management protocols. Immediate multidisciplinary assessment and intervention are necessary for the management and survival of the patient. In this study, we present a case of a 27-year-old female who presented to the Department of Acute Medicine and High Dependency Unit with complaints of nausea, vomiting, and altered level of consciousness. She had consumed a significant amount of alcohol 12 hours before admission. Laboratory results revealed severe high anion gap metabolic acidosis that was not corrected by sodium bicarbonate and adequate fluid resuscitation. Her acidosis persisted, and after a session of Sustained Low-Efficiency Dialysis (SLED), metabolic acidosis was corrected. However, she developed sudden vision loss after 48 hours. A complete ophthalmic assessment was performed, and a referral was made to a neurologist for multidisciplinary management. On ophthalmo-logical evaluation, both pupils were dilated with absent pupillary response, visual acuity was reduced to hand motion. Brain magnetic resonance imaging showed acute methanol toxicity with hemorrhagic necrosis in the basal ganglia. Despite undergoing therapy, methanol-induced optic neuropathy continues to pose a significant healthcare challenge. It is a severe complication that can occur even after metabolic acidosis has been corrected. Therefore, early detection and timely treatment are crucial to prevent long-term health consequences.

Keywords: Methanol-induced bilateral, optic neuropathy

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