

Ethylene Glycol Poisoning-Freeze the antifreeze

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Ingestion of ethylene glycol may be an important contributor in patients with metabolic acidosis of unknown cause and subsequent renal failure. Expedient diagnosis and treatment will limit metabolic toxicity and decrease morbidity and mortality. Ethylene glycol poisoning should be suspected in an intoxicated patient with anion gap acidosis, hypocalcaemia, urinary crystals, and nontoxic blood alcohol concentration.

I would like to discuss the case of an unconscious patient who presented to us with severe unexplained metabolic acidosis. Suspicion of poisoning was delayed considering the history of the patient from the relatives. But because of the high anion gap acidosis & osmolar gap his blood was tested for Ethylene Glycol levels. The results were got in 3 hrs time with levels of Ethylene glycol of 840mg/L. The time of intoxication was estimated to be about 14hrs before admission. The patient developed signs of intoxication like confusion agitation, slurring of speech & unsteadiness of feet the previous evening. But he was sedated by the local doctor with chlorpromazine & was brought to the hospital when he was unresponsive the next morning. Patient was transferred to the ITU for hemodialysis & ethanol infusion. The acidosis was corrected in 5 hrs time but patient progressed into Acute Renal Failure & was dialysis dependant with no other neurological impairment. He had an ITU stay of 45 days. I would like to discuss the management of ethylene glycol poisoning as it is not very common but a treatable condition where treatment has to be started quick enough to prevent permanent damage.