Poster Presentations - Day 2, 17th November 2018

P-31

A case report of a fatal cyanide poisoning.

Muhaimin Azwan Mohd Azman¹, Ruth Sabrina Safferi² ¹Emergency Medicine Department, University Malaya Medical Centre, Malaysia ²Emergency Medicine Department, Klang General Hospital, Malaysia

Objective: To report a fatal case of cyanide poisoning, with an initial diagnostic conundrum.

Case Report: A previously healthy 37-year old man was brought to the Emergency Department after being found unconscious at his home by his friends, an hour prior. Limited history was obtained due to the language barrier between the emergency team and the patient's friends. His friends denied any history of drug abuse or ingestion. Intubation was preformed due to his Glasgow Coma Scale (GCS) of 3/15. He was hypotensive so infusion of noradrenaline was started after fluid resuscitation. Physical examination revealed pupils size 4mm with sluggish response to light stimulation. Other systemic examination was unremarkable. His bedside capillary glucose and ketone was 13.6 mmol/L and 0.5 mmol/L respectively. The blood gas showed severe metabolic acidosis with pH of 7.044, pCO₂ 37.3 mmHg, HCO₃⁻ 10.0 mmol/L and lactate of 18 mmol/L. A plain computed tomography (CT) scan of the brain was planned. An hour after presentation, another friend arrived and informed that the patient was a goldsmith, and that a piece of bitten white object was found at the patient's house which he claimed was cyanide. The patient had access to cyanide due to his occupation. In view of patient's condition and his profound metabolic acidosis, a provisional diagnosis of intentional cyanide poisoning was made and hydroxocobalamin was given. His CT brain showed global hypoxic ischaemic encephalopathy. His initial blood results were otherwise insignificant and there was no evidence of paracetamol or salicylate co-ingestion. He was subsequently transferred to the medical ward and succumbed to his illness two days later.

Conclusion: Cyanide poisoning is an important diagnosis to be considered in a case of lactate acidaemia.

References:

(1) Chin RG, Calderon Y. Acute cyanide poisoning: a case report. J Emerg Med. 2000; 18:441–445.
(2) Coentrao L, Moura D. Acute cyanide poisoning among jewellery and textile industry workers. Am J Emerg Med. 2011; 29:78–81.

