Acute ammonium dichromate poisoning in a 2-year-old child

Sir,

I have two comments on the interesting case report by Sunilkumar *et al*.[1]

First, I do agree with Sunilkumar *et al*.[1] in their statement that the diagnosis of a poisoning case

mainly depends on the history, direct identification of the compound, if available and clinical examination. Though the history was suggestive of ingestion of ammonium dichromate, I wonder why the authors did not estimate the blood level of chromium in their studied patient. I presume that Sunilkumar *et al*.[1] did not seek to perform that measurement as they addressed in their study that ammonium dichromate is a highly dissociable compound and it is not easily demonstrable by chemical analysis of viscera or body fluids. Actually, toxicological documentation of chromium poison and measuring its blood level are of paramount importance in clear cut and suspected chromium poisoning as blood chromium concentration exceeding 1 mg/100 mL is of diagnostic and prognostic value indicating an ingestion and absorption of the high doses of this metal.[2] Hence, it would be of high value in planning suitable therapeutic interventions.

Second, it is well-known that the vast majority of poisonings in young children are due to exploratory ingestions that could be prevented by meticulous family supervision. However, poisoning, particularly in infants and young children could be one form of child abuse.[3] An interesting American study recruiting a cohort of poisoning victims under the age of 6 years was conducted to evaluate for suspected maltreatment and referral to child protective services (CPS). The study showed that 6% of referrals to CPS were secondary to concerns for intentional poisoning.[4] In the case report in question intentional poisoning as a part of child abuse cannot be ruled out. Psychological assessment of parents and exploring marital conflicts, if any, ought to be considered.

Mahmood Dhahir Al-Mendalawi
Department of Paediatrics, Al-Kindy College of Medicine,
Baghdad University,
Baghdad, Iraq

Correspondence:
Prof. Mahmood Dhahir Al-Mendalawi,
P.O. Box 55302, Baghdad Post Office,
Baghdad, Iraq.
E-mail: mdalmendalawi@yahoo.com

Access this article online

Quick Response Code:

Website: www.ijccm.org

DOI: 10.4103/0972-5229.154585

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