

TITLE

PHARMACOKINETIC STUDY OF HAIR DYE POISONING: A STUDY OF 50 CASES

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Para phenylenediamine is a very common ingredient in most of the hair dye preparations. It is one of the most common poisonings in emergency medicine and toxicological practice in some of the less-developed nations in South Asia. The main objective of the present study was to estimate the para phenylenediamine in hair dye poison using HPLC method and it's Pharmacokinetic of patients. We studied consecutive patients of PPD admitted to the medical intensive care unit (ICU) (MGM Hospital, Warangal, Andrapradesh) between January 2009 and July 2009. 50 patients who were admitted, in emergency ward with history of having hair dye poisoning were analyzed for the pharmacokinetic studies, time to arrive in the hospital, conscious level, mode of poisoning (Homicidal, Suicidal or accidental) treatment given and outcome. The results of the study showed that age 21-30 years is the major group involved in poisoning 48% as compared to ages 31-40 years (12%) and age more than 45 years (4%) , also age group 16-30 years is having more suicidal tendencies as well as accidental poisoning tendencies decrease with increasing age. Female victims are more as compared to male (77% vs 23%) in the study group. Rural population is more at the risk of poisoning, In addition to that depletion of glutathione levels and elevation of MDA, CPK levels suggesting decrease in antioxidant status and an overwhelming the oxidative stress respectively. Our research conclude that need to study specific antidote for poisoning and a supportive antioxidant therapy to decrease the stress and muscle damage.