

Paraphenylenediamine poisoning in Tunisia: A case report

Dorra Amira, Ines Gana, Nouioui Anouar and Hedili Abderrazek
University of Monastir, Tunisia

Background: In Tunisia, women use Para-Phenylenediamine (PPD) as an additive to henna in order to intensify the black temporary tattoos unaware of its deleterious effect. In this work we present a case report of poisoning by the PPD in order to highlight its noxious effects and discuss the complications resulting from PPD poisoning.

Description case: A young women was admitted to the emergency services. The patient was suffering from vomiting, muscle pain, motor deficit in the lower limbs and Paresthesia. The medical interrogatory confirmed the ingestion of unknown substance.

Material & Methods: The toxicological investigation was conducted on fresh urine sample and on the ingested product. A preliminary screening was performed on both matrices by Thin Layer Chromatography (TLC). The presence of PPD was further confirmed by (GC/MS). Biochemical analysis was performed by immunoassay (COBAS INTEGRA 400 plus®).

Results: The screening by TLC and GC/MS confirmed the presence of PPD in the ingested product. Besides, its metabolite N-N'-diacetyl-PPD was also identified in urine sample collected from the first dialysis performed 48 hours after ingestion of the toxic product. The urine samples collected 72 and 96 hours were negative. The biochemical analysis showed rhabdomyolysis reflected by an increasing of CPK and LDH levels (> 200,000 IU / L, 13000 IU / L) 48 H after ingestion. Abnormal liver function and kidney disease have been reported.

Conclusion: Rhabdomyolysis with respiratory, renal and heart disease are considered as the main signs of PPD poisoning. The therapy requires adequate medical care assistance

Biography

Dorra Amira is a Professor of Toxicology at University of Pharmacy in Monastir, Tunisia. She is responsible for the toxicology lab at assistance medical care and Emergency center, Tunis- Tunisia.

dorra_amira2004@yahoo.fr

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