



Abstract

Hair dye absorption is a rare cause of poisonousness in Pakistan. Hair dyes contain paraphenylene-diamine (PPD) and a host of other chemicals that can cause rhabdomyolysis, laryngeal edema, severe metabolic acidosis and acute renal failure. Clinical outcomes rely on early recognition, rapid referral, and violent supportive treatment. Timely involvement has been shown to improve the outcome. There are many case reports of PPD poisoning in adults in which it was mainly used for careful self-harm purpose. However, there is very little data regarding PPD poisoning in children. We report a case of a three-year-old boy who presented with severe respiratory distress and angioedema, who underwent emergent tracheostomy placement.

Hair dye containing PPD is widely used in India because of its free availability and low cost. PPD produces local as well as systemic toxic effects when applied topically and/or ingested. It is highly toxic when taken by mouth and the outcome depends mainly on the dose taken. Important clinical manifestations are angioedema leading to dysphasia and respiratory distress, rhabdomyolysis, intravascular hemolysis, acute renal failure and hepatic necrosis. Myocarditis or fatal arrhythmia may also occur in PPD poisoning. Support of management is early recognition and supportive measures as there is no specific antidote. We hereby report a young female who presented to us with features of angioedema, cardiac manifestation and hepatic dysfunction after ingesting PPD, which was treated successfully. In the absence of laboratory facilities, clinical features like angioedema and chocolate brown-colored urine could be suggestive of PPD poisoning.

The commonest constituent of all hair dyes is PPD being used by the people to color their hair all over the world. Hair dye poisoning is emerging as one of the emerging causes of intentional self-poisoning to commit suicide. In this article, the importance of clinical appearances and of hair dye poisoning is discussed due to the lack of specific diagnostic tests. Since there is no specific antidote for PPD poisoning, the early supportive treatment modalities are discussed.