

Hair Dye (Kala Pathar) Poisoning-A Lethal Toxin with Fatal Outcomes

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Seventy-three percent of suicides in the world occur in developing countries¹. It is the third heavy cause of death in 15-44 years age-bracket².

In Southeast Asian countries, the practice of self-harm with poison ingestion is exceedingly common. Although pesticide poisoning being the most common, there has been an alarming increase in hair-dye ingestion in lower income countries like Pakistan, Bangladesh, Sri Lanka and India.

The use of so-called Kala-Pathar aka Paraphenylenediamine (PPD) in making hair color is by and large confined to emerging nations specifically and is exceptionally rare in western world because of strict usage guidelines. On the contrary, the commonness of unintentional and self-destructive ingestion is more found in low financial regions where it is arising as a typical method for self-destruction especially Africa and Asia³. In our locale, Pakistan, reports have been received and recorded generally from Sindh and Punjab detailing the clinical signs and symptoms after (PPD) containing hair color ingestion⁴.

The aftermath of hair color intoxication is wide and notwithstanding. The results are hazardous as it causes multi-organ involvement⁵. It presents all the more generally with serious angioedema of face and neck prompting respiratory failure, rhabdomyolysis leading into intense kidney damage, myocarditis and severe liver injury. Increased

mortality rate ranging from 20% to 68.8% has been witnessed in local studies⁶. The highly gruesome clinical repercussion of majorly poisonous substance Paraphenylenediamine (PPD) is the perilous cervico-facial edema obtunding airway patency and grasping patient's life in a short span of time. This life-threatening poison calls for a rapid endotracheal intubation due to lack of any counteract.

While possibly not all, most instances of self-destructive Kala-Pathar poisoning happen with young to middle-aged females⁵. This is worrisome as it depicts a vulnerable population that is in urgent need to be addressed and safe from. Another reason that requires attention is the easy availability and low costing. Also, noteworthy here is the fact that PPD chemical is also found in mehndi or Henna used by most females for application on their hands and feet on joyous and merry occasions.

To finish up, Paraphenylenediamine (PPD) or (Kala Pathar) intoxication is an admonition to the Asian nations as its arising incidences in contrast to organophosphate poisoning due to its minimal expense, simple accessibility and sharpness. Timely management and early intubation serve high chances of survival. It is of utmost importance to create public mindfulness regarding this toxin and its lethal consequences in purchasing of Kala Pathar or hair-dye ought to be lawfully confined by Government authorities because it is posing grievous threats to the young generation. It is also advised and recommended to health practitioners to notify such cases for not only awareness but also for treatment advances.

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