A PROSPECTIVE OBSERVATIONAL STUDY ON PREVALENCE OF POISONING CASES - FOCUS ON VASMOL POISONING. [PARA-PHENYLENEDIAMINE (PPD) POISONING]

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Background:
The intentional and accidental poisoning by various modes are common in India. Nearly 1 million people die each year globally due to poisoning. Vasmol is an external preparation that contains para-phenylenediamine as major ingredient, used as hair-dye. There were no much studies on Vasmol (PPD) poisoning. Our study mainly focused on Vasmol (PPD) poisoning, as its incidence is more in our region.

Purpose:
To detect and evaluate the prevalence of different poisoning cases and to analyze the clinical symptoms, causes, their outcome and finally to assess the effectiveness of supportive therapy for Vasmol (PPD) poisoning.

OBJECTIVES:
1. To understand the prevalence for poisoning cases.
2. To analyze the presenting features of Vasmol poisoning.
3. To evaluate the clinical course and outcome.
4. To assess the effectiveness of supportive therapy.
5. To create the awareness among patients on Vasmol poisoning and its complications.

Materials and methods:
A prospective observational study was conducted on different poisoning cases over 5-months period (March 2011 to July 2011) in general medicine and ICU departments of a tertiary care teaching hospital. A specially designed patient data collection format was used to collect the information and various parameters were analyzed.

Results and Discussion:
Out of 688 poisonous cases, Vasmol (PPD)-419, Organophosphorous-90, Tablets-62, Others-109 were observed. In Vasmol (PPD) poisoning 126(30%), male and 283(69%) female with most cases between the age-group of 12-25. The clinical features were: Cutaneous rash-163(40%), Stridor-102(24%), Myalgia-79(19%), Gastrointestinal disturbances-37(9%), Seizures-51(12), Vertigo-66(13%), and Rhabdomyolysis-138(32%). Tracheostomy is the most commonly used supportive therapy which was done for 7(1%) cases where 62 recovered and 18 died. Deaths were mainly due to Cardio- respiratory failure-11(26%), Myocarditis-6(26%), Cardiac-arrest-21(11%) and Acute renal failure-1(5%). Rest of the results were categorized based on socio-demographic status, volume consumed, reasons for poisoning and laboratory findings.

Conclusion:
Vasmol (PPD) hair dye intoxication is a life threatening condition. Clinical outcomes rely on early recognition, prompt referral and supportive therapy. This study has shown that Vasmol (PPD) poisoning mortality was 5%, due to Cardio-respiratory failure, Cardiac-arrest, Myocarditis and Acute renal failure. Tracheostomy is the life-saving measure in reducing mortality. Community should be educated about handling of poisonous substances which endanger their life and there should also be a proper control over sale of Vasmol.

References:

MECHANISM OF RHABDOMYOLYSIS.

Deaths due to complications