A CLINICAL PROFILE OF ACUTE POISONING
Vaddadi Srinivas¹, Vaddadi Radha Srinivas²

HOW TO CITE THIS ARTICLE:
Vaddadi Srinivas, Vaddadi Radha Srinivas. “A Clinical Profile of acute poisoning”. Journal of Evolution of Medical and Dental Sciences 2015; Vol. 4, Issue 29, April 09; Page: 4923-4925, DOI:10.14260/jemds/2015/718

ABSTRACT: 100 patients were studied to know the common poisons, age, sex, clinical manifestations, response to treatment, motive behind the consumption and prognostic factors. Out of 100 cases, most of them committed this with suicidal intention, 21-30 age group, males, insecticide poison consumed were affected. 70% of them had domestic problems as the main reason to commit this extreme step. Those who reached early to the hospital had recovered well with a mortality rate of 7%.

KEYWORDS: Insecticide, Organophosphorus, Rodenticide, Herbicide.

INTRODUCTION: Acute poisoning has reached epidemic proportion and poisoning by drugs and chemical agents is an important medical emergency which carries high mortality. The nature of poison used varies in different parts of the world and may vary in different parts of the same country depending on the socio-economic factors and cultural environment. Management of these patients will be greatly improved if the common causes of poisoning and other epidemiology factors in the population are properly defined. Information about acute poisoning scanty, so an attempt has been made to know the clinical profile of acute poisoning.

PREVALENCE: Poisoning is occurrence of harmful effects of resulting from exposures to either foreign chemical or xenobiotic can occur by ingestion, inhalation or contact, intentionally or unintentionally. WHO statistics estimate 346000 people worldwide die from unintentional poisoning more than 90%. India accounts for one third of pesticide poisoning cases in the third world. Farmers are worst affected. Prevalence of poisoning differ in various parts of states in the country, it also depends on socioeconomic and cultural environment existing in that area. Management of these Patients will be greatly improved if common causes of poisoning and other epidemiological factors are properly defined. Information about Acute poisoning Patients admitted in hospitals available from our country is scanty. So an attempt has been made to know the clinical profile of poisoning.

MODES OF POISONING: Acute poisoning had reached epidemic proportions and poisoning by drugs and chemical agents like organophosphorus poisoning¹, Diazinon (Tick-20)², Rodenticide poisoning and Sedative, hypnotic over dose and Herbicide poisoning following them. Most often, the types of poisoning were Accidental, Deliberate self-poisoning, Homicidal and Non-accidental poisoning.

CASE STUDY: A Study of clinical profile of 100 consecutive patients of poisoning cases in an year were conducted in our hospital, Visakhapatnam to know common poisons, AGE, SEX, COMMON POISONS CONSUMED, CLINICAL MANIFESTATIONS, Immediate response to TREATMENT, MOTIVE BEHIND POISONING and prognostic factors after consumption of poison.

The aim of study is to analyze common poison consumed in this area their manifestations behind poisoning and to ascertain various prognostic factors after consuming the poison. 100 cases
of consecutive poisoning cases were studied for their various manifestations. Snake bite and scorpion sting were excluded from the study.

Out of 100 cases, the age group was as followed, 21 to 30 years age group (50%), 11 to 20 (28%), rest in other age group involved. Nature of poison were unknown 20%, baygon spray 10%, Rat poison 9%, acid 7%, phenol 7%, kerosene 3%. Among 100 cases, 70% had suicidal intention, 19% had accidental ingestion and in 11% unknown. Motive behind their act were, 70% of them had domestic issues, accidental 19%, alcohol 3%, occupational exposure 2%. The circumstances which force young people to take such drastic steps were mainly due to broken love affairs, marital disharmony, failure in examination and unemployment problems.

Patients had experienced the following symptoms, 30% vomiting, 20% cramps and colics, dyspnea in 15%, 5% were cyanosed at admission, 4% aspirated gastric content in to lungs, 80% were conscious, 10% drowsy, 5% unconscious. As far as Organophosphrous, poisoning patients were concerned, they had muscurinic (15%), nicotinic (10%) manifestations. Out of 5 unconscious patients, 3 patients who were unconscious for over 36 hours had expired, 2 patients unconscious for <12 hrs had recovered. Patients were treated with specific antidotes and supportive managements accordingly. Serious manifestations included were neurological (15%) and pulmonary-edema 10% cases, shock in 2% and 6% had LVF.

**DISCUSSION:** In this study, out of 100 patients 23% of cases were due to organophosphrous and carbamates (Insecticide Poisoning). 54% of them were males and 46% were females. Maximum age was between 11-30 years. The outcome was very good in those patients who reached hospital within two hours, prognosis worse in those who came late. Though 5 cases were unconscious at admission, 2 recovered well with prompt treatment. 6 patients who had left ventricular failure improved with diuretics, 2 patients who had circulatory failure improved with ionotropic support. 2 patients with acid poisoning developed hemetemesis required blood transfusions. This study showed mortality rate of 7% compared to British group 19%, Chandigarh group 17%.

**Prevention:** To reduce the occurrence of poisoning cases, few suggestions can be given to the public like Adult education, Double-checking dosage before administration. High Vigilance by health professionals to recognize the early signs of abuse and potential suicide in patients who attend to Emergency room. Keeping all medicines and household chemicals in a locked child-proof cupboard >1.5 meters off the ground to evade children reaching it. Safely dispose of medicines and chemicals which are not needed or are out of date from domestic utility area. Keep all medicines and chemicals in their original containers with clear labels to prevent accidental ingestion.

**CONCLUSION:** As the poisoning cases increasing day to day life, prompt treatment helps in securing lives of many patients. Psychosocial analysis, with the help of psychiatric consultations will help these patients not to commit such deeds in the future.
REFERENCES:
1. Basu, A. K. Das and S. Chandrasekhar – Organophosphrous Poisoning – a clinical profile – JAPI 1988, 36, 24.
2. Balani SG, Fernandes SO, Lakshmi RH, Juthani VJ – Diazinon (Tik 20) poisoning: A report of 100 cases with particular reference to evaluation of treatment – JAPI 1968, 16, 911-917.
3. Nirmal, Senanayake M. D. and Lakshman K – Neurotoxic effects of organophosphorous insecticides. New England Journal of Medicine 1987, 316, 761-763.
4. Common poison – unusual complications – Journal of Associations of Physicians of India 1990: 38, 499-501.
5. Perron R, Johnson BB – Insecticide Poisoning – NEJM 1969, 281, 274-275.
6. Prondfoot A – Diagnosis and Management of Acute Poisoning, Oxford, Blackwell Scientific Publications, 1982.
7. Alexander A. H. Lawson, Ian Mitchell – patients with acute poisoning seen in General Medical Unit. British Medical Journal 1972, 4, 153-156.
8. Singh S, Sharma B. K., Wahl P. L., Anand B. S., Chugh K. S. – Spectrum of acute poisoning in adults (10 years' experience). Journal of ASSOCIATION OF Physicians of India, 1984, 561-563.

AUTHORS:
1. Vaddadi Srinivas
2. Vaddadi Radha Srinivas

PARTICULARS OF CONTRIBUTORS:
1. Associate Professor, Department of Medicine, Andhra Medical College, Visakhapatnam.
2. Deputy CMO (Physician), Golden Jubilee Hospital, VPT.

FINANCIAL OR OTHER COMPETING INTERESTS: None

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Vaddadi Srinivas,
501, “B” Block,
Sun N Moon Heights,
Ramnagar,
Visakhapatnam-530002.
E-mail: drvaddadisrinivas@gmail.com

Date of Submission: 28/03/2015.
Date of Peer Review: 28/03/2015.
Date of Acceptance: 30/03/2015.
Date of Publishing: 07/04/2015.