

STUDY OF CLINICAL PROFILE OF PESTICIDE POISONINGY. V. L. Narasimham¹, B. Srinivasa Rao²**HOW TO CITE THIS ARTICLE:**

Y. V. L. Narasimham, B. Srinivasa Rao. "Study of Clinical Profile of Pesticide Poisoning". Journal of Evolution of Medical and Dental Sciences 2015; Vol. 4, Issue 50, June 22; Page: 8694-8697, DOI: 10.14260/jemds/2015/1258

ABSTRACT: BACK GROUND AND OBJECTIVE: Poisoning may be defined as injuring or killing one self with a poison. A Poison is any substance that through its chemical action (and same time through its physical action) impairs, injures or kills an organism. The exact incidence of this problem in India remains uncertain but it is estimated that about seven to ten million cases of poisoning are reported every year of which nearly 10, 000 die¹. Because of its frequently, its potentially lethal course and complete reversibility the proper management of patients its important. The following steps showed be instituted in order to have favourable outcome a) Initial resuscitation. b) Identification of poison. C) Non Specific treatment. d) Specific treatment. e) Supportive treatment.

KEYWORDS: Pesticide poisoning, Muscaranic, Nicotinic effects, Cholinesterase levels.

INTRODUCTION: Among all poisoning cases pesticide poisoning is common poisoning because of its availability painless death and its lethality.² These compounds are rapidly absorbed by all routes respiratory gastrointestinal and through the eyes and skin the various signs and symptoms of poisoning may be classified as three categories muscaranic, nicotinic and central nervous system function.^{3,4}

- A. Muscaranic features are: salivation, lacrimation, urination, defecation, gastrointestinal cramps and emesis miosis is very characteristic feature the C.V.S features hypotension and bradycardia.⁵
- B. Nicotinic features: -Fasciculations, cramps, fatigue.
- C. CNS. Features: Severe Headache tremors, restlessness, and confusion these are less pronounced in carbamate poisoning. An acute garlic odour is characteristic feature.⁶

Intermediate Syndrome: weakness of the upper extremities and neck muscles, cranial nerve palsies and secondary respiratory arrest.

AIM OF THE STUDY: The aim of study is to study clinical profile of pesticide poisoning.

MATERIAL AND METHODS:

Inclusion Criteria: Patients with:

1. Age 15 to 50 years.
2. Muscaranic effects.
3. Nicotinic and CNS effects.
4. Plasma cholinesterase levels.

Exclusion Criteria:

1. Patients with snake bite poison.
2. Patients with drug poison.
3. Patients with plant poison.

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PLACE AND PERIOD: This study was done in Andhra Medical College Visakhapatnam 2013 to 2014, 50 cases are taken into the study.

HISTORY AND EXAMINATION: The patients who are referred to medical outpatient department and causality are admitted. The patients from 15 to 50 years both male and females were included. People of various socioeconomic classes were included. All patients were questioned for detailed history. The symptoms are seen, salivation, sweating, spitting, urination lacrimation, fasciculations, tremors, headache, and miosis, bradycardia, hypotension are noted past H/O Hypertension and postural hypotension, diabetes enquired. Next careful general examination of external injuries are noted and asked and observed the poison containers. On examination bradycardia and bilateral massive crepitations noted.

LABORATORY TESTS: Blood tests and urine tests were done to check diabetes and renal diseases. Plasma cholinesterase levels are decreased, and X ray chest PA for pulmonary oedema and ECG for ST-T Changes are seen.^{7,8}

OBSERVATION: Out of 50 cases 27 case are males 23 are females. So the problems is common in males 54% are out of 46% are females. In this study the age group for both sexes 15 to 50 years. Age group analysis in own study revelled maximum occurrence in 15 to 30 years with 41 patients (82%) follows by 31 to 50 years age group 9 patients (18%) most of the cases are pesticide poisoning most of the cases are organophosphorus 30 cases (60%) and carbomates 8 cases (16%) and organochlorines DDT 12 cases (24%) most of the cases are organophosphates Dichlorvos, Chlorpyrifos, Malathion, Dimethoate. And most of the cases are in carbamates group are propoxur (Baygon), carbaryl. In organochlorines most of the cases are consumed, gama benzene hexachloride (GBH) and DDT.

Most of the cases are suicidal poisoning 40 cases (80%) reaming 10 cases (20%) are accidental poisoning at agricultural field works. The causes for poisoning are family problems (60%) financial problem (20%) and examination failures (10%), Accidental poison (10%). Most of the cases are low income and middle income groups.

CONCLUSION: The present study indicates

1. Out of 50 cases 27 males 23 are female.
2. The most cases are 80% suicidal poisoning. 20% cases in accidental poisoning.
3. The most common symptoms are in order salivation excessive sweating, spitting, urination.
4. The most common signs are miosis, brady-cardia fasciculations, tremors. Slurred speech.
5. The most common nicotinic effects are fasciculations and tremers.
6. The most common E C G abnormalities are ST- T Change.
7. The most common X-Ray findings are pulmonary oedema.
8. Plasma cholinesterase levels are decreased.

SUMMARY: It is found that the most poisoning cases are seen in males, most of the cases of are suicidal poisoning cases. Common symptoms are muscaranic symptoms (Salivation, Sweating) then nicotinic symptoms are fasciculations and tremors, and all cases are survived.

ORIGINAL ARTICLE

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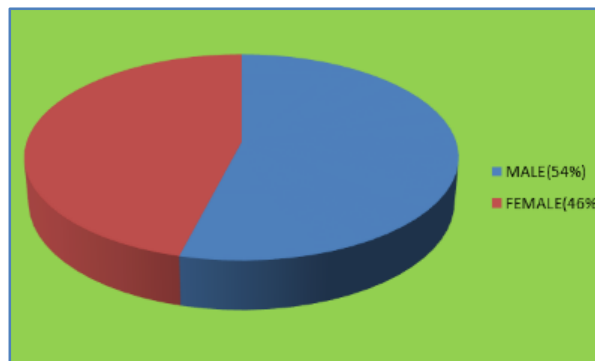


Fig. 1: Poisoning among gender

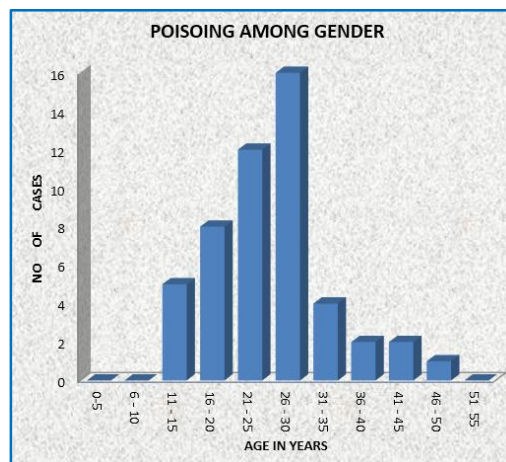


Fig. 2

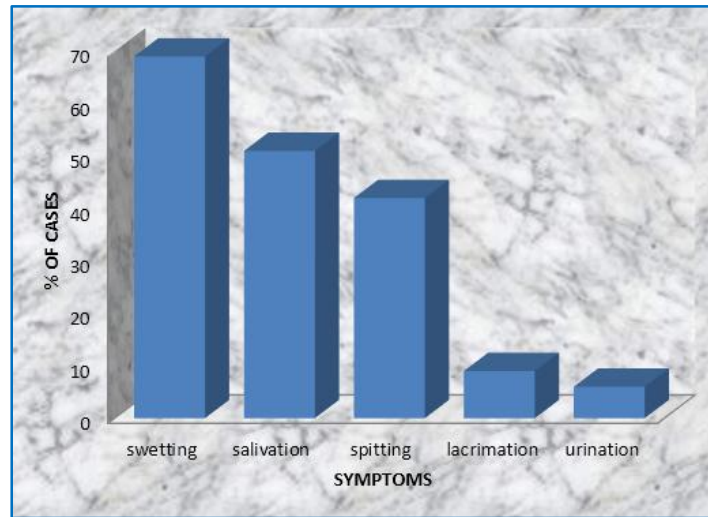


Fig. 3: Symptoms

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FINANCIAL OR OTHER

COMPETING INTERESTS: None

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Date of Submission: 24/05/2015.
Date of Peer Review: 29/05/2015.
Date of Acceptance: 16/06/2015.
Date of Publishing: 19/06/2015.