**Impact Factor:** 

**ISI** (Dubai, UAE) = **0.829 GIF** (Australia) = **0.564** = 1.500

= 3.117

**ISRA** (India)

JIF

SIS (USA) = 0.912**РИНЦ** (Russia) = **0.156** = 5.015 ESJI (KZ) **SJIF** (Morocco) = **5.667** 

ICV (Poland)	= 6.630
<b>PIF</b> (India)	= 1.940
IBI (India)	= 4.260

SOI: <u>1.1/T</u>	AS DOI: <u>10.15863/TAS</u>		
International Scientific Journal			
<b>Theoretical &amp; Applied Science</b>			
<b>p-ISSN:</b> 2308-4944 (print)	e-ISSN: 2409-0085 (online)		

Year: 2018 Volume: 67 **Issue:** 11

http://T-Science.org Published: 30.11.2018

**SECTION 20. Medicine.** 

QR – Issue







**Kiran Abdul Rasheed** Dr., WMO at PKLI Lahore, Pakistan kiran31abdulrasheed@gmail.com

**Anam Rashid** Dr., WMO at DHQ Okara, Pakistan anamrasheed2310@gmail.com

**Moiz Arshad Chohan** Dr., Doctor at Jinnah Hospital Lahore, Pakistan moizarshad123@hotmail.com

# PRESENTING SIGNS AND SYMPTOMS OF ORGANIC POISONING

Abstract: Objective: This study was conducted to determine presenting signs and symptoms of patients after taking organic material like pesticides as suicidal or homicidal.

Design: This is an observational study of cross sectional type.

Setting and duration: study was conducted in Nishtar Hospital Multan, a tertiary care hospital with 2000 beds. Study was started in February 2018 and completed in October 2018.

Patients and Methods: There were 60 cases reported in study hospital medical emergency with organic poisoning. They reached the hospital on the same day of poisoning. Their signs and symptoms were recorded and documented properly. These cases were admitted in the hospital and treatment was given on emergency basis in ICU care. These Cases had age range of 16-55 years with mean age of 37.5 years. An including criteria was established according to which patients were selected. Those not falling on criteria were excluded from the study.

Results: There were 60 cases reported with pesticide poisoning. Their minimum age was 16 years and maximum age recorded was 55 years. There were 20% cases between 15-25 years age, 34% between 26-35 years, and remaining cases were above 35 years of age. There were 20% cases who died inspite all measures taken and 80% survived.

Conclusion: Pesticide poisoning is a very lethal and commonly used mode of poisoning. Its outcome depends on quantity of poison taken, route of poisoning, time of presentation to hospital and condition of patient at the time of encounter to first health care facility. Such patients should be kept in ICU in continuous monitoring where ventilator should be present for the time of need.

Key words: Pesticides, poisoning, organophosphorous, presentation, outcome. Language: English

Citation: Abdul Rasheed, K., Rashid, A., & Arshad Chohan, M. (2018). Presenting signs and symptoms of organic poisoning. ISJ Theoretical & Applied Science, 11 (67), 338-340. *Soi*: <u>http://s-o-i.org/1.1/TAS-11-67-59</u> Doi: crossed https://dx.doi.org/10.15863/TAS.2018.11.67.59

## Introduction

There were 60 cases reported in study hospital medical emergency with organic poisoning. They reached the hospital on the same day of poisoning. Their signs and symptoms were recorded and documented properly. These cases were admitted in the hospital and treatment was given on emergency basis in ICU care. These Cases had age range of 16-55 years with mean age of 37.5 years. An including criteria was established according to which patients were selected. Those not falling on criteria were

excluded from the study. Initially intravenous fluids and atropine are given and gastric lavage is done. These patients require management on emergency bases providing ICU care and ventilator support. In such patients ski was decontaminated, gastric lavage done, activated charcoal administered via nasogastric tube according to 1g per kg body weight and atropine given intravenously according to 2mg every 30 mint then its infusion started until body secretions of the patient reduced and pupil mid dilated and heart rate becomes 100-130 per mint. Which patients went into



Impact Factor:	ISRA (India) = 3.117	<b>SIS</b> (USA) = <b>0.912</b>	<b>ICV</b> (Poland) $= 6.$	.630
	<b>ISI</b> (Dubai, UAE) = <b>0.82</b> 9	<b>РИНЦ</b> (Russia) = <b>0.156</b>	<b>PIF</b> (India) $= 1$ .	.940
	<b>GIF</b> (Australia) = $0.564$	<b>ESJI</b> (KZ) $= 5.015$	<b>IBI</b> (India) $= 4$ .	.260
	JIF = 1.500	<b>SJIF</b> (Morocco) = <b>5.667</b>		

respiratory failure with respiratory rate greater than 35 per mint, loss of consciousness, oxygen saturation of blood less than 90% and hypotension with systolic blood pressure less than 80mmHg, they were immediately intubated and shifted on ventilator support.

#### **Patients and Methods**

This is a cross sectional study of observational type. Study was completed in duration of 9 months. Study was conducted in Nishtar hospital Multan. There were 60 cases reported in study hospital medical emergency with organic poisoning. They reached the hospital on the same day of poisoning. Their signs and symptoms were recorded and documented properly. These cases were admitted in the hospital and treatment was given on emergency basis in ICU care. These Cases had age range of 1655 years with mean age of 37.5 years. An including criteria was established according to which patients were selected. Those not falling on criteria were excluded from the study. Consent was taken from all patients on written performa. Permission was also taken from medical superintendant of the hospital.

#### Results

There were 60 cases reported with pesticide poisoning. Their minimum age was 16 years and maximum age recorded was 55 years. There were 20% cases between 15-25 years age, 34% between 26-35 years, and remaining cases were above 35 years of age. There were 20% cases who died inspite all measures taken and 80% survived. Presenting complaints include anxiety, convulsions and breathlessness.

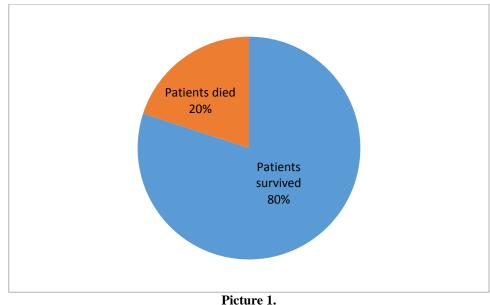


Table	1.
-------	----

Neurological Sign/ symptoms	Number of patients	Frequency (%)
Anxiety	30	50
Convulsions	6	10
Restlessness	11	18.3
Tremors	9	15
Coma	4	6.7
Total	60	100

#### Discussion

There were 60 cases reported in study hospital medical emergency with organic poisoning. They reached the hospital on the same day of poisoning. Their signs and symptoms were recorded and documented properly. These cases were admitted in the hospital and treatment was given on emergency basis in ICU care. These Cases had age range of 16-55 years with mean age of 37.5 years. An including criteria was established according to which patients were selected. Those not falling on criteria were excluded from the study. Initially intravenous fluids



	ISRA (India)	= 3.117	SIS (USA)	<b>= 0.912</b>	ICV (Poland)	= 6.630
Impact Factor:	ISI (Dubai, UAE)	) = <b>0.829</b>	РИНЦ (Russia)	) = <b>0.156</b>	<b>PIF</b> (India)	= 1.940
	GIF (Australia)	= 0.564	ESJI (KZ)	<b>= 5.015</b>	IBI (India)	= 4.260
	JIF	= 1.500	SJIF (Morocco)	) = 5.667		

and atropine are given and gastric lavage is done. These patients require management on emergency bases providing ICU care and ventilator support. A study done by Synanyaka on 10 cases found respiratory failure type-2 in patients of such poisoning and 70% of them were shifted on ventilator. Initially such patients experience anxiety, confusion, weakness of proximal muscles and followed by cranial nerves palsy. In our study 27 cases developed anxiety, 3 developed convulsions, 19 restlessness and 11 patients developed tremors. In gastrointestinal system presentation of disease was in the form of nausea and vomiting and abdominal pain in most of the patients and less frequently diarrhea and increased salivation. There were 60 cases reported with pesticide poisoning. Their minimum age was 16 years and maximum age recorded was 55 years. There were 20% cases between 15-25 years age, 34% between 26-35 years, and remaining cases were above 35 years of age. There were 20% cases who died inspite all measures taken and 80% survived. Presenting complaints include anxiety, convulsions and breathlessness. This is a cross sectional study of observational type. Study was

**References:** 

- 1. Bardin, P. G., et al. (1994). Organophosphate and Carbamate Poisoning. *Arch Intern Med*, *154*, 143-144.
- 2. Jeyaratnam, J. (1990). Acute Pesticide Poisoning a major health problem. *World Health Stat Q, 43,* 139-145.
- 3. Jamil, H. (1989). Organophosphorous Insecticide Poisoning. JPMA, 39, 27-31.
- 4. Cherian, A. M., et al. (1997, Dec.). Pralidoxime in the treatment of organophosphorus poisoning-a randomized, double blind, placebocontrolled clinical trial. *INCLEN Monograph series on Critical International Health Issues No.7*.
- 5. Shah, A. C., et al. (1990). Intensive respiratory care service. Organisation, orientation, system and future. Our experience of management of 288 cases. *J Assoc Physicians India*, *38*, 140-143.
- Hayes, W. J. (1982). Organophophate insecticides. In pesticides studied in Man. Edi by Hayes WJ. Baltimore, MD Williams and Wilkins; pp. 285-315.
- Haddad, L. M. (1990). Organophosphates and other insecticides. In: L.M. Haddad, J. Winchester (Eds.). Clinical management of Poisoning and Drug over dose, W.B. Saunders Company, pp.1076-1087.

completed in duration of 9 months. Study was conducted in Nishtar hospital Multan. There were 60 cases reported in study hospital medical emergency with organic poisoning. They reached the hospital on the same day of poisoning. Their signs and symptoms were recorded and documented properly. These cases were admitted in the hospital and treatment was given on emergency basis in ICU care. These Cases had age range of 16-55 years with mean age of 37.5 years.

### Conclusion

Pesticide poisoning containing organophosphorous compound is very common in underdeveloped countries and its mortality and morbidity is very high. It requires management on emergency bases and aggressive treatment is needed. Ventillators should be present to treat such patients. Manifestation of disease may be via any body system but most dangerous is respiratory manifestation causing respiratory failure in the end. Early diagnosis and proper management can decrease such complications and life of the patient can be saved.

- 8. Agarwal, S. B. (1993). A clinical, biochemical, neurobehavioral and sociopsychological study of 190 patients admitted to hospital as a result of acute organophosphorous poisoning. *Environ Res, 62,* 63-70.
- Wadia, R. S., Sadagopan, C., Amin, R. B., & Sardesai, H. V. (1974). Neurological manifestations of organophosphorous insecticide poisoning. J Neurol Neurosurg Pshychiatry, 37, 841-847.
- 10. Bardin, P. G., & van Eeden, S. F. (1990). Organophosphate poisoning: grading the severity and comparing treatment between atropine and glycopyrolate. *Crit Care Med*, *18*, 956-960.
- Kamal, A. A., et al. (1990). a serum choline esterase and liver function among a group of organophophorous pesticides sprayers in Egypt. *J Toxical Clin Exp*, 10, 427-435.
- De Silva, H. J., Wijewickrema, R., & Senanyake, N. (1992). Does pralidoxime affect outcome in acute organophophorous poisoning? *Lancet*, 339, 1136-1138.
- Ram, J. S., Kumar, S. S., & Jayarajan, A. (1991). Continuous infusion of high doses of atropamine in the management of organophosphorous compound poisoning. J Assoc Physicians India, 39, 190-193.

