ADITUM
Enrich your Research

Aditum Journal of Clinical and Biomedical Research

Letter to the Editor

Colorless, Odorless and Tasteless Chemical Danger: Sarin

Ali Karakuş
Hatay Mustafa Kemal University Faculty of Medicine, Deparment of Emergency Medicine, Hatay-Türkiye.

Article Info

Received: November 05, 2026
Accepted: November 16, 2026
Published: November 23, 2026

Corresponding author: Professor, MD, Ali Karakuş
Hatay Mustafa Kemal University, Faculty of Medicine, Department of Emergency Medicine
Email address: drkarakus@yahoo.com
Phone number: +905052540433
Orcid ID: 0000-0003-1358-3201.

Citation: Karakuş A., (2026) "Colorless, Odorless and Tasteless Chemical Danger: Sarin" Aditum Journal of Clinical and Biomedical Research, 8(1); DOI: 10.61148/2993-9968/AJCBR/125.

Copyright: ©2026. Ali Karakuş. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction:

Chemical weapons are solid, liquid and gas (vapor, aerosol). Chemical properties affect the cells of living organisms. Chemical weapons are mass destruction, hurtful and capacity-reducing agents. The most toxic chemical weapon is the nerve agent. Sarin is a chemical war agent called nerve agent. Purpose of this study raise awareness about the about sarin gas used as a weapon of mass destruction.

This compilation will be handled the fatal Sarin Gas for the masses. The toxicity mechanism of sarin gas, ways of exposure, clinical findings and emergency medical help will be evaluated in the literature.

Toxic effects of nerve agents Similar to toxic effects of organophosphate pesticides. The acetylcholinesterase enzyme (AChE) inhibits. It directly affects the nervous system of the person. They vitalize vital functions.Acetylcholinesterase (AChE) enzyme; It is an enzyme that disables Acetylcholine (ACh), which stimulates nerve cells.Thus, Acetylcholine (ACh) cannot be destroyed and accumulates excessively.Severe twitches can be seen in the muscles resulting in excessive acetylcholine increase. Exposure routes of the nerve agent are breathing, skin and eye contact, swallowing. Also, the nerve agent vapor is more intense than air, which is a negative condition for odor detection. Symptoms for exposed people; vomiting and diarrhea, respiratory distress, pulmonary edema, convulsions, ventricular enlargement and loss of consciousness are the main causes of blurred vision, blurred vision, nasal discharge, dizziness, agitation, excessive secretion production.

As medical treatment and antidote; Atropine can prevent excessive nerve stimulation by cutting the acetylcholine receptors. Oximes are used to reactivate the inhibited enzymes so that ACh can be reduced in excess. Diezapam can be used to control agitation and convulsions.

Sarin gas is known to be produced and stored in many countries. The first to respond in chemical events are health experts and disaster relief organizations. Staff must know to resist chemical substances.

Keywords: Sarin, Chemical Weapon, Chemical Nerve Agent

Copyright © Ali Karakuş

References:

1. Qin J, Li R, Raes J, Nielsen T, Yamada T. A human gut microbial gene catalogue established by metagenomic sequencing. Nature 2010; 464(7285): 59-65. Alp H, Karakus A, Çelik MM, Basarslan SK. A Novel Therapeutic Strategy for Organophosphate Poisoning: Phytotherapy Medýcal Journal of Mustafa Kemal Unýversýty. 2012; 3: 8-16.
2. Karakus A,Çelik MM, Karcioðlu M, Tuzcu K, Erden ES, Zeren C. Cases of organophosphate poisoning treated with high-dose of atropine in intensive care unit and the novel treatment approaches. Toxicology and Industrial Health 2014; 30(5):421–425
3. Kuvandık G, Karakus A, Fansa I. Poisoning with nerve gas. Editor: Ali Karakuþ. Gas poisoing. Derman Medical Publishing, Ankara, 2015.

Copyright © Ali Karakuş