

US EPA ARCHIVE DOCUMENT

DATA EVALUATION RECORD

TRICHLORFON

Human Observations

CITATION: Babchina IP. 1972. Nervous system damage in trichlorfon poisoning. Vrach. Delo 2:137-139 [Translation].

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DATA EVALUATION RECORD

STUDY TYPE: Human Observations.

CITATION: Babchina IP. 1972. Nervous system damage in trichlorfon poisoning. Vrach. Delo 2:137-139. [Translation].

ACCESSION NUMBER: Not available.

MRID NUMBER: Not available.

LABORATORY: Pavlov First Leningrad Medical Institute.

TEST MATERIAL: Trichlorfon solution (not otherwise specified).

PROTOCOL:

1. The effects of trichlorfon on 3 human patients were reported:

Patient 1 was a male, age 39, poisoned September 5, 1970, was observed neurologically on September 5, 1970.

Patient 2 was a female, age 30, poisoned August 17, 1969, admitted August 31, 1969.

Patient 3 was a male, age 34, poisoned August 30, 1970, admitted October 13, 1970.

2. All 3 cases involved single oral exposures as a result of accident or suicide attempt and were complicated by polyneuritis (2 cases) or intoxication psychosis in the form of delerium (1 case).
3. Upon admission to the treatment facility, patients were examined and the effects investigated.

RESULTS:

- a. Patient 1 was cyanotic upon admission to the hospital and had respiratory distress. Pain appeared 5 days after poisoning and paralysis developed in the upper and lower extremities. Neurological findings 6 months later when admittted to the neurological clinic included an absence of deep reflexes, paralysis of extremities and polyneuritis. Some restoration was produced in the function of the paralyzed muscles after treatment.

- b. Pain and weakness of the lower extremities were reported in patient 2. Three weeks of therapy restored her to a good condition, and she was released. Pain and distal leg weakness returned rapidly and further treatment was unsuccessful. Polyneuritis was diagnosed.
- c. In patient 3, acute exposure to a 30 percent solution of trichlorfon resulted in toxic delirium syndrome complicated by neurovascular damage. Some improvement resulted from treatment.

CONCLUSIONS:

Two patients developed polyneuritis and delirium within 3-5 days following trichlorfon poisoning, while one patient developed polyneuritis after three weeks. In two patients chronic alcoholism was postulated to have induced rapid and intense neurological symptoms. Trichlorfon-induced polyneuritis proved to be stable and persistent.

CORE CLASSIFICATION: Supplementary.

This report is considered as supplementary since it provides useful descriptive information on human poisoning with trichlorfon, but is limited due to the lack of information on quantitative exposure levels, therapeutic treatment, and cholinesterase determinations.