

Case Study

Observational Study of Toxicological Symptoms in Plumbum Metallicum: A Case Report

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DOI: <https://doi.org/10.24321/2394.6547.202508>

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How to cite this article:

Ganguly A. Observational Study of Toxicological Symptoms in Plumbum Metallicum: A Case Report. J Adv Res Ayur Yoga Unani Sidd Homeo. 2025;12(3&4): 15-18.

Date of Submission: 2025-05-31

Date of Acceptance: 2025-06-21

A B S T R A C T

Introduction: Chronic lead poisoning or plumbism is found mostly among the labourer connected with handling of lead or its salts. Children and women using vermilion on scalp are also victims of it. Main symptoms of it are anaemia, abdominal colic with constipation and neurological symptoms including paralysis of wrist and encephalopathy. In the proving of Plumbum Metallicum, the main source of symptoms are toxicological which can also make a brilliant cure in lead poisoning cases by the principle of symptom similarity, the case which I present here is one of them.

Objective: Homoeopathy is based on the law of "Similia Similibus Curentur" a Latin phrase meaning "like is cured by like." If the symptoms of lead poisoning are similar to the toxicological symptoms in Plumbum which are laid down in Materia Medica the cure takes place. In this study I verify it again.

Material and Methods: Here toxicological symptoms in Plumbum Metallicum are collected from "The Encyclopaedia of Pure Materia Medica" by T.F Allen, vol-8.¹ After each symptom the number mentioned denotes the name of the collector and the source from where the symptoms have taken. For example, swallow, pale face is a toxicological symptom of Plumbum, beside this symptom is written¹⁸ Ducosta Med and S Rep, 1867, in workers.¹⁹ Corson Canada, Lancet 1874, P-141, effect of water from leaden pipes are within. For repertorization "Repertory of Hering's Guiding Symptoms of our Materia Medica" by C. B Kner is used.⁴ There are four numerograph beside each rubric, I, I.I, I.II, I.III. I= 1st grade, I= 2nd grade, II= 3rd grade, I= 4th grade. For verification of toxicological symptoms Dr. J.B. Mukherjee's "Text Book of Forensic Medicine and Toxicology" is used.⁵

Results: Based on the maximum number of rubrics and consultation with Materia Medica Plumbum Metallicum removed the symptoms of chronic lead poisoning and cure took place.

Conclusion: Plumbum Metallicum can cure chronic lead poisoning case.

Keywords: Metals, Toxicological Symptoms, Drug Proving, Lead, Plumbum Metallicum

Case Report

A 35-year-old male was complaining loss of appetite, occasional colicky pain in abdomen, constipation for last six months.

- **Past History:** chicken pox at 15 yrs of age.
- **Family history:** Father had hypertension. Mother had diabetes, and died due to heart attack,
- **Personal history:** He worked in a paint factory over 3 years as a manufacturing worker of paint. His thirst was moderate, stool was black, hard and passed 2-3 days interval for last 1 yr. He had severe colicky pain in abdomen which was relieved by hard pressure for last 3 months. He was married and had one son. He was lethargic and did not fix his mind in anything now a days. Forgot about recent incident. On examination his face had marked paleness. A blue line was seen along the margin of gums.

Laboratory findings

Routine blood: Hb- 8.1gm/dl, RBC: 4.5 million/mm with 400 stippled RBC, blood lead: 0.3 mg/100 ml (normal 0.03 mg/ 100 ml).

Toxicological Symptoms of Lead Poisoning (Plumbum)^{1,6-7}

- **Severe Constipation:** Bowel movements are infrequent, occurring only once in eight to ten days. The stool is notably scanty, blackish in colour, and its passage is painful and distressing. This constipation is a characteristic sign of lead toxicity.²
- **Intense Abdominal Pain:** Extremely violent, colicky pains are experienced in the umbilical (navel) region. These pains are often severe and radiate to other parts of the abdomen. The discomfort may be somewhat alleviated by applying pressure to the abdomen—a classic indication of lead colic.³
- **Marked Loss of Appetite:** Individuals exhibit a significant decline in appetite, often developing a strong aversion to food. This anorexia may lead to noticeable weight loss and general weakness.⁴⁻¹¹
- **Blue Line on Gums (Lead Line):** A distinct blue or bluish-black line is observed along the margins of the gums, especially near the base of the teeth. This line results from the deposition of lead sulphide in the oral tissues and is a diagnostic indicator of chronic lead exposure.¹²⁻¹⁵
- **Cognitive Impairment and Memory Loss:** The patient demonstrates noticeable mental confusion and forgetfulness. While speaking, they may struggle to recall or articulate the correct words, indicating an impact on cognitive functions.¹⁶
- **Tendency to Stupor or Lethargy:** A general mental dullness or stuporous condition is present. The

individual may appear drowsy, slow to respond, or mentally withdrawn, which suggests involvement of the central nervous system.¹⁷

- **Pallor and Facial Discoloration:** The face appears shallow and pale, sometimes with a waxy or unhealthy complexion. This pallor may be due to anaemia, another common consequence of prolonged lead exposure.^{18,19,22,23}

Rubrics selected from Repertory of Hering's Guiding Symptoms of our Materia Medica by C.B.^{8,9,20}

Kneer

Weakness of Memory – Frequently Has to Think for the Right Word

- **Rubric:** Memory, weak, frequently has to think for right word
- **Grade:** Plumbum – 2nd Grade
- **Explanation:** Indicates mental fatigue and impaired cognitive processing, a hallmark of chronic lead toxicity. The inability to retrieve the appropriate word during conversation suggests deteriorating memory and concentration.

Stupor, Lethargy, Sopor

- **Rubric:** Stupor, lethargy, sopor
- **Grade:** Plumbum – 2nd Grade
- **Explanation:** Represents a significant depressive state of the central nervous system with drowsiness, mental dullness, and sluggish responses, commonly observed in lead encephalopathy.²¹

Pale Face

- **Rubric:** Face, pale
- **Grade:** Plumbum – 2nd Grade
- **Explanation:** Pallor or an unhealthy pale appearance is often a sign of lead-induced anemia, resulting from suppression of hemoglobin synthesis.

Bluish Gums – Distinct Lead-Colored Line along Margin

- **Rubric:** Gums, bluish, a distinct lead colour line along margin
- **Grade:** Plumbum – 1st Grade
- **Explanation:** A diagnostic clinical sign of chronic lead poisoning. The bluish line, or "Burton's Line", appears due to deposition of lead sulfide at the gum margins.

Constipation

- **Rubric:** Constipation
- **Grade:** Plumbum – 1st Grade
- **Explanation:** One of the most common symptoms of lead toxicity, involving infrequent, hard, and painful bowel movements.

Black Stool

- **Rubric:** Stool, black
- **Grade:** Plumbum – 2nd Grade
- **Explanation:** Black discoloration of stool may occur due to altered gastrointestinal activity and bleeding or presence of heavy metals such as lead.

Colic with Constipation

- **Rubric:** Colic with constipation
- **Grade:** Plumbum – 2nd Grade
- **Explanation:** A classic combination of lead colic – severe abdominal cramps associated with obstinate constipation.

Colic from Lead Poisoning

- **Rubric:** Colic from lead poisoning
- **Grade:** Plumbum – 2nd Grade
- **Explanation:** Specific indication of Plumbum in cases where abdominal colic is directly caused by lead toxicity. The pain is often relieved by pressure and is typically located around the umbilicus.

Loss of Appetite (Anorexia)

- **Rubric:** Appetite lost, anorexia
- **Grade:** Plumbum – 2nd Grade
- **Explanation:** Persistent loss of desire to eat or aversion to food, which contributes to weight loss and malnutrition in chronic cases.

Prescription and Follow-up

Initial Prescription (27.07.2024)

- Plumbum Metallicum 200, 2 doses in 30 mL of aqua distillata
- Dosage: Once daily for 2 days (O.D × 2 days)
- Rubrum 200, 13 doses
- Dosage: Once daily for 13 days (O.D × 13 days)

First Follow-up (11.08.2024)

- Marked improvement in appetite
- Stool softened and passed regularly
- Gum color returned to normal pink
- Prescription: Rubrum 200, 15 doses (O.D × 15 days)

Second Follow-up (26.08.2024)

- Appetite normal
- Stool regular and without colicky pain
- Prescription: Rubrum 200, 15 doses (O.D × 15 days)

Conflict of Interest: None

Source of Finding: None

Declaration of Generative AI and AI-Assisted

Technologies in the Writing Process: None

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