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The enigma of parkinsonism in chronic borderline mercury intoxication, resolved by challenge with penicillamine.

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Abstract

A 47 year old female dentist suffered from hemiparkinsonism which had started eighteen months earlier and was manifested mainly by resting tremor and cogwheel rigidity. A baseline quantitative urinary mercury excretion was 46 micrograms/day. The patient was treated with chelating agent d-penicillamine for a week. Chelation therapy resulted in clinical improvement of parkinsonism and in dynamic changes in daily urinary mercury excretion with a prompt increase to 79 micrograms/day, a subsequent decline followed by increase in the mercury urinary excretion. After a week chelation therapy was stopped. During a follow-up period of five years, the neurological status remained unchanged after the initial penicillamine-induced improvement. This case may be evidence, therefore, of a rare clinical variant of elemental mercury intoxication associated with parkinsonism, in the absence of most classical neuropsychiatric signs of chronic mercurialism.

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[Publication Types, MeSH Terms, Substances](#)

Publication Types:

- [Case Reports](#)

MeSH Terms:

- [Chelating Agents/therapeutic use*](#)
- [Dentists](#)
- [Female](#)
- [Humans](#)
- [Mercury/adverse effects](#)

- [Mercury/urine](#)
- [Mercury Poisoning/drug therapy*](#)
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- [Occupational Diseases/chemically induced](#)
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Substances:

- [Chelating Agents](#)
- [Penicillamine](#)
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