



Poison HOTLINE

1-800-222-1222

September 2022

Suicide Prevention Month



We can all help prevent suicide.

#BeThe1To

Ask. Be there. Keep them safe.
Help them stay connected. Follow up.

Did you know

September is suicide prevention month. Last year, 20% of poisonings and overdoses reported to the IPCC were for suicidal intent. Over 85% of these cases involved a prescription and/or over the counter medicine.

One of the most effective ways to prevent suicide is to reduce access to lethal means. Know exactly what medicines and how much are in the home. Keep all medications locked up and away. Safely dispose of all unused and expired medicines.

Call **1-800-222-1222** to report a poisoning or overdose of any reason.

**POISON
Help**
1-800-222-1222

Lithium

Lithium is approved for the treatment of bipolar disorder and used off label for treatment of other psychiatric conditions such as schizophrenia and depressive disorders. Although this drug is effective and has been used safely for decades, it has a very narrow therapeutic range.

The brain and central nervous system (CNS) are the targets of lithium toxicity which can present as acute, acute-on-chronic, and chronic overdoses. Neurological signs and symptoms are the best indicators of lithium toxicity. Serum lithium levels do not accurately reflect CNS lithium levels because of slow distribution of lithium into and out of the CNS.

In **acute overdose**, there are typically GI symptoms followed by neurological symptoms.

- Mild symptoms: Nausea/Vomiting, abdominal pain, tremors, agitation, hyperreflexia
- Moderate symptoms: CNS depression, confusion, coarse tremors, hypertonia, ataxia
- Severe symptoms: seizures, rigidity, hypotension, hyperthermia, coma

In **chronic toxicity**, patients usually present with neurological symptoms or change in mental status.

- Neurological symptoms: CNS depression, confusion, tremor, hyperreflexia, seizures, coma
- Renal symptoms: renal insufficiency or failure, diabetes insipidus, polyuria, polydipsia

Activated charcoal is not useful in lithium ingestions. Treatment is good supportive care focusing on euvolemia, maintenance of normal sodium levels, and treating symptoms. Treat seizures with benzos or consider phenobarbital or propofol for recurrent seizures. Dialysis can be considered in lithium toxicity. The decision to perform dialysis should be based on many factors and not the lithium level alone. Consider symptoms, chronicity of toxicity, renal function, hydration status, medical conditions, and lithium level. Hemodialysis helps reduce half-life. Serum concentrations rebound after dialysis due to redistribution from intracellular compartments.

*Jenny Smith, RN, CSPI
Certified Specialist in Poison Information*

Hotline Editor: Bryan Wilson, MD

Post and share this edition of **Poison Hotline** with your colleagues. Send comments or questions to Poison Hotline, 712-234-8775 (fax) or Tammy.Noble@UnityPoint.org. To subscribe or unsubscribe from this distribution list, contact the IPCC education office at 712-279-3717. Read past issues of **Poison Hotline** at www.iowapoison.org.