

Supplement to Chapter 20

Maintenance Medical Treatment

To supplement the discussion of lithium's role in the medical maintenance of bipolar illness, here we present a box on lithium toxicity that originally appeared in the first edition of *Manic-Depressive Illness*.

## **Lithium Intoxication: Degrees of Toxicity and Treatment Guidelines**

### **Mild**

#### **Recurrence and/or intensification of a previously transient or mild side effect**

- Difficulty concentrating, cognitive impairment
- Muscle weakness, heaviness of the limbs
- Irritability
- Nausea

### **Moderate**

- Drowsiness, lassitude
- Dullness, disorientation, confusion
- Slurred or indistinct speech
- Blurred vision
- Unsteady gait
- Coarse hand tremor
- Restlessness
- Muscle twitches
- Lower jaw tremor
- Giddiness
- Vomiting

### **Severe**

#### **Intensification of any of the above**

- Marked apathy, impaired consciousness, may progress to coma
- Ataxia
- Irregular hand tremor
- Prominent generalized muscle twitches
- Choreiform/parkinsonian movements

### **Neurotoxicity Treatment Guidelines<sup>a</sup>**

- Withdraw lithium
- Obtain serum lithium, electrolyte, creatinine levels
- Carry out complete physical examination
- Increase lithium clearance by saline infusion in mild to moderate toxic reactions (plasma lithium < 3 mmol/liter)
- Closely monitor and maintain fluid and electrolyte balance
- Measure plasma lithium level at least every 12 hours
- Start renal hemodialysis or peritoneal dialysis if patient is comatose, in shock, severely dehydrated; and/or if plasma lithium level  $\geq 3$  mmol/liter; or if patient fails to respond to 24 hours of conservative treatment; or if patient's condition deteriorates.

<sup>a</sup>Adapted from Johnson, FN. The History of Lithium Therapy. London: MacMillan Press, 1984.