

Oral presentation

Mood stabilizers: lithium

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Although lithium has been used in the treatment of various psychiatric conditions in the past 4 decades, it is particularly beneficial for the acute and long-term treatment of mania and in some bipolar and unipolar patients, for prophylaxis and treatment of depression. In recent years, however, young physicians have largely ignored the benefits of lithium in favor of anticonvulsant or atypical antipsychotic pharmacotherapy for patients with bipolar disorder. Moreover, while lithium was studied extensively in the past, recent literature shows a paucity of controlled studies of the drug. The effects of lithium on depolarization-provoked and calcium-dependent release of dopamine and norepinephrine from nerve terminals in the central nervous system (CNS), neuronal second messenger signaling pathways, CNS cytoprotective proteins, and the distribution of Na⁺, Ca⁺ and Mg⁺ across neuronal membranes all have been suggested to contribute to its therapeutic effects. Adverse events occur in 35% to 93% of lithium-treated patients. Most of the common side effects, which include excessive thirst, polyuria, memory problems, tremor, weight gain, drowsiness and diarrhea, are troublesome rather than life-threatening, but some, such as memory problems, tremor and weight gain, often lead to noncompliance. More recent studies have found that 42% to 64% of patients with bipolar disorder do not respond to lithium treatment, including patients with mixed states, personality disorders, comorbid substance abuse, mania secondary to other medical conditions, rapid cycling, or previous failed trials of lithium. The effectiveness of lithium prophylaxis appears to be dose dependent. It has been reported that a lithium dose that was adjusted to maintain a target serum concentration of 0.8 to 1.0 mmol/L was more effective at preventing relapse than a lower dose targeted to maintain a serum lithium concentration of 0.4 to 0.6 mmol/L. However, the higher dose was associated with an increased inci-

dence of side effects. Finally, many patients discontinue their lithium use after a relatively short period of time. In an analysis of data from a large health maintenance organization, half of patients prescribed lithium discontinued it within about 10 weeks, and this discontinuation was associated with an increased likelihood of psychiatric hospitalization. It has also been shown that, occasionally patients stabilized on lithium of extended periods of time may become lithium-resistant after discontinuing the agent and then suffer a relapse.