8.8: Antimania

Mood stabilizers are used to treat bipolar affective disorder. Lithium was the first medication used to treat this disorder and is sometimes referred to as an anti-mania drug because it can help control the mania that occurs in bipolar disorder. Lithium must be closely monitored with a narrow therapeutic range. [1]

Lithium

Mechanism of Action

Lithium alters sodium transport in nerve and muscle cells and effects a shift toward intraneuronal metabolism of catecholamines, but the specific biochemical mechanism of lithium action in mania is unknown. [2]

Indications for Use

Lithium is indicated in the treatment of manic episodes of bipolar disorder and as a maintenance treatment for individuals with a diagnosis of bipolar disorder.

Nursing Considerations Across the Lifespan

Lithium must be closely monitored with a narrow therapeutic serum range of 0.8 to 1.2 mEq/L. Serum sodium levels should also be monitored for potential hyponatremia. [3]

The drug is contraindicated in renal or cardiovascular disease, severe dehydration or sodium depletion, and to patients receiving diuretics because the risk of lithium toxicity is very high in such patients.
Lithium can cause fetal harm in pregnant women. Safety has not been established for children under 12 and is not recommended.

When given to a patient experiencing a manic episode, lithium may produce a normalization of symptomatology within 1 to 3 weeks. \[^{[4]}\]

**Adverse/Side Effects**

Black Box Warning: Lithium toxicity is closely related to serum lithium levels and can occur at doses close to therapeutic levels at 1.5 mEq/L. Facilities for prompt and accurate serum lithium determinations should be available before initiating therapy. Lithium can cause abnormal electrocardiographic (ECG) findings and risk of sudden death. Patients should be advised to seek immediate emergency assistance if they experience fainting, lightheadedness, abnormal heart beats, or shortness of breath.

Signs of early lithium toxicity include diarrhea, vomiting, drowsiness, muscular weakness, and lack of coordination. At higher levels, giddiness, ataxia, blurred vision, tinnitus, and a large output of dilute urine may be seen. No specific antidote for lithium poisoning is known; treatment focuses on the elimination of the medication.

Fine hand tremor, polyuria, and mild thirst may also persist throughout treatment. \[^{[5]}\,\[^{[6]}\]

**Patient Teaching & Education**

Patients should take medication as directed. It is important to note the antimanic drugs may increase dizziness and drowsiness. Additionally, if individuals have low sodium levels, it may predispose the patient toxicity. Patients should also be advised that weight gain may occur.

Now let’s take a closer look at the medication grid for lithium in Table 8.8. \[^{[7]}\,\[^{[8]}\]

<table>
<thead>
<tr>
<th>Class/Subclass</th>
<th>Prototype/Generic</th>
<th>Administration Considerations</th>
<th>Therapeutic Effects</th>
<th>Adverse/Side Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antimanic</td>
<td>lithium</td>
<td>Black Box Warning: Monitor for signs of lithium toxicity</td>
<td>When given during a manic episode, symptoms may resolve in 1-3 weeks</td>
<td>Lithium toxicity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Monitor serum lithium and sodium levels</td>
<td>When given for maintenance therapy, it should reduce the frequency and intensity of manic episodes</td>
<td>Hyponatremia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contraindicated in renal and cardiovascular disease and in dehydration</td>
<td></td>
<td>Tremor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cardiac arrhythmia</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Polyuria</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Thirst</td>
</tr>
</tbody>
</table>

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Critical Thinking Activity 8.8

A 42-year-old male was recently diagnosed with bipolar disorder after his partner became concerned about his extreme highs and lows in moods. His high mood swings were often associated with grandiose ideas, gambling, risky sexual behavior, and shopping sprees that were causing the couple to go bankrupt. The physician prescribed lithium.

1. The patient states, “The doctor told me I am having manic episodes. What does that mean?” What is the nurse’s best response?

2. The nurse knows that there is a risk of lithium toxicity. What are the symptoms of lithium toxicity, and how will it be prevented?

3. The patient’s partner asks, “How quickly will the lithium work?” What is the nurse’s best response?

Note: Answers to the Critical Thinking activities can be found in the “Answer Key” sections at the end of the book.


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