Use of Lithium for Treatment of Bipolar Disorder During Pregnancy

Bipolar disorder is a serious mental illness that affects approximately 1% of the general population. In addition to the debilitating mood and behavioral symptoms that characterize the disorder, comorbid anxiety and substance use is quite common. Bipolar disorder is considered a lifelong condition and symptoms often begin in a person’s late teens and early twenties, placing women at particular risk during their child-bearing years. Over the years, a lot of conflicting information regarding the safety and effectiveness of medications for pregnant woman has been published, leaving patients and sometimes their doctors confused about the best treatment options for bipolar disorder. One study surveyed women with bipolar disorder seeking advice from medical professionals regarding pregnancy. Results showed that 45% reported that a psychiatrist or other mental health professional advised them to avoid pregnancy altogether and 37% took that advice. Many treating physicians face the complex clinical challenge of minimizing the risk to the fetus, while at the same time limiting the potential harmful effects of the untreated illness on the mother, the fetus, and the family system. In other words, which is worse, the medications or the untreated disease?

A variety of mood stabilizing medications are used to treat bipolar disorder, with lithium being a more common treatment option. Recent studies show about a 60% relapse rate, on average, if lithium is discontinued in women with bipolar disorder, and the relapse rate and severity of symptoms is higher in cases where the medication was stopped abruptly. The postpartum period also represents a period of high risk for bipolar disorder and other mood disorders and studies showed that women given lithium in the several weeks prior to birth had a 2-5 times reduction in bipolar symptoms.
Recent reviews have examined the estimated risks of lithium to the unborn fetus. The risk of certain heart malformations (e.g., Ebstein’s anomaly) is somewhat higher in lithium-exposed fetuses compared to non-exposed fetuses; however, the overall incidence of heart malformations is still very low (1-2 per 1000 pregnancies). Some experts have concluded that the highest risk for any malformations associated with lithium exposure occurs in the first trimester. Reintroduction of lithium in the second and third trimesters was not associated with major malformations. Some studies have reported neurotoxic effects of lithium in the newborn, which include low muscle tone and impaired breathing, often referred to as “floppy baby” syndrome. Long-term effects of lithium exposure on brain development, learning, and behavior have not been substantiated. Although case reports do exist in the literature, the limited number of studies using matched samples did not report significant differences in offspring’s behavior.

Experts reviewing the literature on lithium-exposure note that more studies are needed to fully understand the risks; however, many consider lithium to be one of the safest mood stabilizing drugs, given the potential negative effects of some of the other medications used to treat bipolar disorder (e.g., anti-convulsants such as valproic acid). The following guidelines have been offered for managing bipolar disorder in pregnant women:

- Planned pregnancy provides time for thoughtful treatment choices. Treatment options are best discussed when women are stable and not symptomatic.

- A streamlined regimen is often the best approach. Some studies have noted increased risk to the fetus when multiple medications are combined.

- The minimum effective dose should be used.
• These patients should be considered “high risk” pregnancies and should be monitored accordingly.

• Serum levels of medications should be monitored throughout the pregnancy, labor, and postpartum period and dosage should be adjusted accordingly. Studies have shown that medications metabolize differently during different reproductive stages. Doctors should consider pregnancy and postpartum period as separate risk periods.

• Treatment guidelines will vary with the severity of the illness, the history of the illness, the medication history, and the overall health of the mother.

• The availability and stability of family supports should also be taken into account, especially if discontinuing medication is being considered.

• The use of older, more established medication over newer medications that have been less well-studied should be considered.

• Other risk factors for poor perinatal outcome, such as tobacco use, alcohol use, illegal drug use, obesity, and poor nutrition, should be reduced or eliminated.

• Women should be provided educational materials regarding treatment options and a risk-benefit assessment should be discussed.

• Continuity of care among treatment providers is important (e.g., good communication between obstetrician and psychiatrist).

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References
