

Using *Lithium* in Children and Adolescents

This information explains how *Lithium* can be used as part of a treatment plan with children and adolescents. You may wish to share this information with your family members to help them to understand your treatment options. Since every person's needs are different, it is important that you follow the advice provided to you by your own doctor, nurse and/or pharmacist and speak to them if you have any questions about this medication.



Overview

Lithium (Lithane[®], Carbolith[®], Duralith[®]) belongs to a group of medications called “mood stabilizers”. Lithium, a natural element, has been used as a mood stabilizer for more than 50 years. It is most commonly prescribed as “lithium carbonate”.

What is Lithium used for?



Lithium is used to treat:

- Mania (elevated mood) associated with Bipolar Disorder.
- Long term control of Bipolar Disorder.

In some cases, lithium is used with antidepressants to help manage some types of depression. It may also be used to treat aggression and impulsivity in some children and adolescents.

Your doctor may be using this medication for another reason. If you are unclear why lithium is being prescribed, please ask your doctor.

How does Lithium work?

Lithium has a “stabilizing” effect on certain chemicals and nerves in the body. By affecting these chemicals, lithium helps to reduce severe mood fluctuations and returns your activity level to normal. It helps you to have more control over your emotions and function better. The way lithium improves the symptoms of bipolar disorder is still not fully known.

How should Lithium be taken?

Lithium is available as capsules and some pharmacies make it in a liquid form. Lithium is usually taken 2 – 4 times a day at first. After several weeks, the dose may be combined and given once a day. The dose of lithium is usually based on how well you respond to it and how much is in the blood.

Usually, your doctor will start with a low dose of lithium and increase it slowly every 3-7 days. Your doctor will ask you to have regular blood tests to measure how much lithium is in your blood. The lithium blood level that works for most people is between 0.6 – 1.2 mmol/L.

Lithium should be taken at the same time each day as directed by your doctor. Try to connect it with something you do each day (like eating breakfast or brushing your teeth) so that you don't forget.

It is important to drink plenty of fluids (like 1-1.5 litres/day of water, juice or milk) when taking lithium.

Do not take your lithium just before getting a blood test – this affects your lithium level results. Instead, take your lithium dose right after the blood test is over.

Whenever possible, the addition of talk therapy (*such as Cognitive Behaviour Therapy – CBT*) to lithium increases the potential for benefits.

When will this medication start working?

When lithium is being used to control mania, it takes about 1-2 weeks before you notice a decrease in symptoms like racing thoughts, improved sleep, and decreased irritability. You might notice an improvement earlier if lithium is combined with other medications.

Since these medications take time to work, do not increase, decrease or stop them without discussing it with your doctor.

Lithium does not work in everyone. If you find it has not helped you within a month, or the side effects are too bothersome, your doctor may recommend you try a different medication.

Tip: Limit the amount of caffeine-containing beverages (e.g., coffee, tea, colas) as these can reduce how well lithium works in your body.

How long do I have to take this medication?



This depends on the symptoms you have, how frequent they occur and how long you have had them. Most people who have bipolar disorder need to take lithium for at least 6 months. This allows time for your symptoms to stabilize and for you to regain functioning while decreasing the chance that you will have another mood episode. After this time, you and your doctor can discuss the

benefits and risks to continuing treatment.

If you have had several episodes of mania or depression and you tolerate this medication well, you may be asked to take this medication indefinitely. By continuing to take this medication, you significantly decrease the chance that you may have another episode of mania or depression.

Do not stop taking this medication if you are feeling better without first discussing it with your doctor.

Once you have started taking lithium, your doctor and you will need to monitor for both the beneficial and unwanted effects. Your doctor will order regular blood tests and will likely check your progress and discuss changes in symptoms during the next 3 months to confirm that the medication is working properly and that possible side effects are avoided.

Keep all appointments with your doctor and the laboratory. Your doctor will order certain lab tests (like kidney functioning tests, thyroid tests, and lithium levels) to check how you/your child is responding to lithium.

Is Lithium addictive?

No, lithium is not addictive. You will not have “cravings” for this medication like some people do with nicotine or street drugs. If you and your doctor decide it is best to stop, your doctor will explain how to safely come off this medication. It has been found in research studies that if you come off lithium slowly (e.g., over a month), you are much less likely to have a return of symptoms than if you stop taking lithium all at once.

What are the side effects and what should I do if I get them?

As with most medications, side effects may occur when taking lithium. Most side effects are considered to be mild and temporary. Side effects may occur before any of the beneficial effects. It is possible for some individuals to experience a side effect that they feel is serious or long lasting. If this occurs, speak to your doctor about ways to manage these side effects. Here are some of the more common side effects of taking this medication. In brackets are suggested ways to lessen these effects.

Common side effects

Should any of these side effects be too troublesome for you, please discuss them with your doctor, nurse or pharmacist.

- Increased thirst (*drink 1-1.5 L of fluids every day*)
- Increased frequency of urination (*don't drink too many fluids after 6 pm so that you can have a restful sleep*)
- Some hand trembling - tremors
- Acne (*use a non-oily face wash daily*)
- Skin rash or itchy skin (*use special anti-itch moisturizers like aveeno*)
- Stomach ache, nausea (*try taking lithium with food*)
- Drowsiness (*try taking the dose at bedtime*)
- Diarrhea
- Headache (*try using a pain reliever like acetaminophen*)
- Weight gain (*monitor your food intake, increase your exercise*)

Uncommon side effects (e.g., those that occur in less than 5% of patients)

Contact your doctor IMMEDIATELY if you have any of these side effects:

- Muscle weakness
- Slurred speech
- Severe nausea
- Vomiting
- Excessive diarrhea
- Blurred vision
- Clumsiness
- Confusion
- Fainting

What precautions should my doctor and I be aware of when taking this medication?

Tell your doctor or pharmacist if you:

- have any allergies or have had bad reactions to other medications.
- have a history of diabetes, heart, kidney or liver disease.
- miss a period, become pregnant, are breast feeding or are trying to become pregnant. Lithium should be avoided in pregnancy if possible due to concerns over neural tube defects.



Tip: When taking this medication, your body may have difficulty regulating your temperature. You need to drink lots of fluids and water to avoid becoming dehydrated. You should avoid doing lots of physical activities on hot days.

Tip: Lithium can make some individuals feel drowsy, dizzy or slowed down. If you experience these temporary side effects, it is important to avoid operating heavy machinery or driving a car.



What special instructions should I follow while using Lithium?

Tell your doctor or pharmacist if you:

- are (or start) taking any other prescription or non-prescription medications. Many medicines interact with Lithium. Your doctor may need to change the doses of your medication(s) or monitor you carefully for side effects if you are taking other medications.
- have a flu or fever.
- have significant loose stools (diarrhea) and vomiting.

Long-term use of lithium can impair your thyroid gland, resulting in a condition caused hypothyroidism.

Symptoms of hypothyroidism include:

- weight gain
- constipation
- muscle weakness or cramps
- fatigue

The doctor can do a blood test to check your thyroid function if you are having these symptoms.

What should I do if I forget to take a dose?

If you miss a dose of this medication, take it as soon as possible. However, if it is almost time for your next dose (e.g., within 4 hours), do not take the missed dose or double your next dose. Instead, continue your regular dosing schedule



What storage conditions are needed for Lithium?

- Keep this medication in the original container, stored at room temperature away from moisture and heat (e.g., not in the bathroom).
- Keep this medication out of reach from children.