



Using *lamotrigine* (*Lamictal*[®]) in Children and Adolescents



Overview

Lamotrigine (Lamictal® and generic forms) belongs to a group of medications called "anticonvulsants" and is used to treat seizure disorders (epilepsy). In adults, lamotrigine is also called a "mood stabilizer". In children and adolescents, this medication may be used to treat mood disorders such as bipolar disorder.

What is lamotrigine used for?

Lamotrigine is approved by Health Canada for the treatment of seizure disorders (epilepsy) in adults and children 2 year of age or over. Like many other medications prescribed for children and adolescents, Health Canada has not approved lamotrigine for management of bipolar disorder. This is called "off-label" use and this occurs when your doctor has determined that the benefits of you taking this medication are greater than the risks (e.g. side effects). Lamotrigine may be used for the following conditions in children and adolescents:

- Treatment of episodes of depression (low mood) associated with bipolar disorder
- Prevention of future depressive or manic episodes associated with bipolar disorder

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



How does lamotrigine work?

Lamotrigine may affect the activity of the brain chemical (neurotransmitter) called glutamate. This medication has a "stabilizing" effect on nerves, which in turn helps to reduce severe mood fluctuations associated with bipolar disorder. The exact way lamotrigine improves the symptoms of bipolar disorder is still not fully known.

How well does lamotrigine work in children and adolescents?

Lamotrigine may be especially helpful for treating and preventing depressive episodes associated with bipolar disorder. It may also prevent future episodes of depression or mania from occurring. Lamotrigine can be used alone or in combination with other medications such as lithium to manage bipolar disorder. When treating a depressive episode, lamotrigine may improve symptoms such as: prolonged sadness; decreased interest or pleasure; difficulty sleeping or sleeping too much; decreased appetite or weight loss; loss of energy or extreme tiredness; slowed movements or agitated behaviour; feelings of worthlessness, guilt or hopelessness; impaired concentration or decision-making skills; thoughts or attempts of suicide and self-harm.

When effective, lamotrigine stabilizes your mood and returns your activity level to normal. This medication may also help you to have more control over your emotions and to improve your overall functioning. Lamotrigine may be particularly helpful for patients who have more than four mood episodes per year (this is called rapid cycling) or who have aggressive behavioural problems. Whenever possible, adding education about your condition (for example: teaching you how to recognize early warning signs of a depressive episode and the appropriate coping strategies) increases the chance you will benefit from taking this medication.



How should lamotrigine be taken?

Lamotrigine comes in regular tablets and chewable/dispersible tablets. The regular tablets should be swallowed whole with a full glass of plain water, and should never be crushed, chewed or split. The chewable/dispersible tablets may be swallowed whole, chewed or dissolved in liquid. However, do not split

the tablets. To help with swallowing, you may drink a small amount of water or diluted fruit juice after chewing the tablet. To dissolve the tablets, place the dispersible tablet in a glass and add a teaspoonful of water or diluted fruit juice (just enough to cover the tablets). Next, wait about 1 minute until the tablets are dissolved and then mix the solution well. Drink this solution immediately. If it is not consumed shortly after dissolving, the solution should be discarded.

Usually, lamotrigine is taken once or twice daily. When starting treatment with lamotrigine, your doctor will usually start with a low dose. The dose will be slowly increased every 2 weeks during the first month. Thereafter, the dose may then be increased every 1 to 2 weeks until a target dose is reached. Your doctor will determine how much you should take, according to your weight, your response to this medication, as well as the other medications you are currently taking. For instance, if you are also taking a medication called divalproex/valproic acid (Epival®/Depakene®), you may be instructed to take lamotrigine once every other day at the beginning of treatment. The dose may then be increased to once daily as directed by your doctor. It is important to follow the dosing schedule as instructed by your doctor to decrease your risk for severe reactions (such as potentially dangerous skin reactions) to lamotrigine.

This medication needs to be taken regularly on a daily basis in order to be effective (even if you feel well). Lamotrigine should be taken at the same time(s) each day as directed by your doctor. Try to connect it with something you do at that time(s) (for example: brushing your teeth) so that you don't forget. Treatment with lamotrigine usually should not be stopped suddenly if you have a seizure disorder, as this may trigger seizures.

When will lamotrigine start working?

When used to control a depressive episode, lamotrigine needs to be taken for several weeks before you notice an improvement in your symptoms. Unless directed by your doctor, do not increase, decrease, or stop taking this medication on your own if there are no improvements in the first few weeks. A delay in response is normal – follow the dose adjustment schedule prescribed by your doctor. Lamotrigine may not work for everyone. If you find this medication has not helped you after 8 weeks of treatment or the side effects are too bothersome, your doctor may recommend switching you to a different medication.



How long do I have to take lamotrigine?

This depends on the symptoms you have, how frequently they occur and how long you have had them. Most people who have bipolar disorder need to take lamotrigine for at least 6 months. This allows your symptoms to stabilize and for you to regain functioning while decreasing your risk of another mood episode. After 6 months of treatment, you and your doctor should discuss the benefits and risks of continuing treatment.

If you have had several episodes of depression or mania and you tolerate this medication well, you may be asked to take this medication for an indefinite amount of time. By continuing to take this medication, your risk of having another mood episode is significantly decreased. Even if you are feeling better, do not stop taking this medication suddenly without first discussing it with your doctor. After you have been taking lamotrigine on a regular basis, stopping it suddenly may increase your risk for having a seizure. If you and your doctor decide to stop using lamotrigine, your doctor will explain how to safely lower the dose gradually. However, if you experience any sort of skin rash while taking lamotrigine, discuss this with your doctor, who may recommend you to stop taking lamotrigine right away.

Is lamotrigine addictive?

Lamotrigine is not addictive. You will not have "cravings" for it like some people do with nicotine or street drugs.

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

As with most medications, side effects may occur when taking lamotrigine. Most side effects are mild and temporary. Side effects may occur before any of the beneficial effects. It is possible for some individuals to experience side effects that they feel are serious or long lasting. If you feel this has happened, speak with your doctor right away. Below are some of the common side effects and potentially serious side effects of taking this medication. In brackets are suggested ways to lessen these effects.

Common side effects

Side effects may be more common when starting a medication or after a dose increase. If any of these side effects is too troublesome for you, please discuss them with your doctor, nurse or pharmacist.

- Dizziness (try getting up slowly from a sitting or lying down position)
- Double vision, blurry vision (do not drive or operate machinery until you know how this medication affects you)
- Drowsiness, tiredness, poor coordination, unsteadiness (avoid alcoholic drinks with this medication. Do not drive or operate machinery until you know how this medication affects you.)
- Flu-like symptoms
- Headache (discuss with your doctor)
- Nasal congestion (trying using a saline nasal spray)
- Stomach ache, nausea, vomiting, diarrhea (try taking the medication with food)

Potentially serious but uncommon side effects (e.g. those that occur in less than 5% of patients)

There are risks involved with taking any medication. Make sure you have had a conversation with your doctor about the potentially serious effects of lamotrigine.

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



- Appearance or worsening of vocal or motor tics, such as shrugging, blinking, head turning, muscle twitches, and throat clearing
- Fever, nausea, vomiting, severe headache, stiff neck and extreme sensitivity to light (this side effect is very rare. Seek medical help immediately if you have these signs of possible meningitis (inflammation of the brain and spinal cord))
- Increased agitation or nervousness
- Increased frequency of seizures
- Rash, fever, swollen glands, hives, sore mouth, sore eyes, or swelling of the lips or tongue (Seek emergency
 medical help immediately if you have any of these signs of potentially dangerous skin reactions, particularly in
 the first 6 weeks after starting lamotrigine treatment. See below for more information.)
- Thoughts of self-harm, hostility or suicide

Although very rare, serious skin reactions to lamotrigine may be life-threatening. Not all skin reactions to lamotrigine are harmful. Some skin reactions such as common hives or red rashes (with or without small fluid filled blisters) tend to go away on their own. More serious skin reactions usually involve larger areas of the body or mucus membranes (such as eyelids, nostrils, mouth or genitals) and are usually accompanied by a fever. It may be difficult to tell whether a rash is harmless or potentially life-threatening. Therefore, it is important to seek medical advice immediately if you develop any rash or skin reaction while taking lamotrigine. The risk for serious skin reactions is the highest during the first 8 weeks of lamotrigine treatment. A serious skin reaction to lamotrigine is unlikely to occur after you have taken lamotrigine for 6 months. People taking divalproex/valproic acid (Epival®/Depakene®) at the same time as lamotrigine may be at a higher risk for developing skin reactions.

To reduce the risk for this potentially serious side effect, follow the dosing schedule carefully as instructed by your doctor (starting with low doses and gradual dose increases). Do not suddenly stop taking this medication without first discussing it with your doctor. Since stopping lamotrigine is usually recommended after development of any new rash or skin reaction (however caused), It is important to avoid other possible common causes of skin reactions when starting treatment with lamotrigine. This may help you avoid having to stop taking a medication that is potentially beneficial for your condition.

To reduce the risk of developing a rash or skin reaction, during the first 3 months after you start lamotrigine:

- Do not start to take other new medications
- Do not start eating new or unfamiliar foods
- Do not use new cosmetics, conditioners, deodorants, detergents or fabric softeners
- Use an appropriate sunscreen to avoid sunburn
- Take appropriate measures to avoid poison oak / poison ivy exposure
- Do not start lamotrigine within 2 weeks of having a rash, viral illness or vaccination

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

Many medications can interact with lamotrigine, including birth control pills; acetaminophen (Tylenol®); anticonvulsants such as divalproex/valproic acid (Epival®/Depakene®) carbamazepine (Tegretol®) and phenytoin (Dilantin®); antidepressants such as sertraline (Zoloft®); caffeine, and several others. If you are (or begin) taking any other prescription or over-the-counter medications, be sure to check with your doctor or pharmacist to see if they are safe to use. Your doctor may need to change the doses of your medication(s) or monitor you carefully for side effects if you are taking certain other medications.

It is important to tell your doctor if you:

- have any allergies or have experienced a reaction to a medication
- have a history of skin reactions to medications
- have a history of heart disease, kidney or liver disease or seizures (epilepsy)
- have a history of blood disorders
- currently or in the past, have had thoughts/attempts of suicide or self-harm
- drink alcohol regularly or have a history of alcohol abuse
- Miss a period, become pregnant or are trying to become pregnant or are breast-feeding. Tell your doctor right away if you become pregnant while taking lamotrigine

What special instructions should I follow while taking lamotrigine?

- Keep all appointments with your doctor and the laboratory. Your doctor may order certain lab tests (for example: liver function tests, complete blood cell counts) to check for side effects of lamotrigine.
- Do not allow anyone else to use your medication.

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

If you take lamotrigine regularly and you forget to take it, take it as soon as you remember. If it is more than 4 hours after your regularly scheduled dose, skip the missed dose and continue with your schedule. Do NOT double your next dose. If you miss taking lamotrigine for more than 3 days, contact your doctor for how to safely restart lamotrigine to reduce the risk of potentially serious skin reactions.



What storage conditions are needed for *lamotrigine*?

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

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.

Developed by the health care professionals of the Child & Adolescent Mental Health Program and reviewed by the staff of the Kelty Mental Health Resource Centre.