Carbamazepine (kar ba MAZ e peen)

What is carbamazepine and what does it treat?
Carbamazepine is a mood stabilizer medication that works in the brain. It is approved for the treatment of bipolar 1 disorder (also known as manic depression) as well as for epilepsy and trigeminal neuralgia. Bipolar disorder involves episodes of depression and/or mania.

Symptoms of depression include:
- Depressed mood – feeling sad, empty, or tearful
- Feeling worthless, guilty, hopeless, or helpless
- Loss of interest or pleasure in normal activities
- Sleep and eat more or less than usual (for most people it is less)
- Low energy, trouble concentrating, or thoughts of death (suicidal thinking)
- Psychomotor agitation (‘nervous energy’)
- Psychomotor retardation (feeling like you are moving in slow motion)

Symptoms of mania include:
- Feeling irritable or “high”
- Having increased self esteem
- Feeling like you don’t need to sleep
- Feeling the need to continue to talk
- Feeling like your thoughts are too quick (racing thoughts)
- Feeling distracted
- Getting involved in activities that are risky or could have bad consequences (e.g., excessive spending)

Carbamazepine may also be helpful when prescribed “off-label” for behavioral or psychological symptoms of dementia. “Off-label” means that it hasn’t been approved by the Food and Drug Administration for this condition. Your mental health provider should justify his or her thinking in recommending an “off-label” treatment. They should be clear about the limits of the research around that medication and if there are any other options.

If you or someone you know is in crisis, please call 911 and/or the toll-free National Suicide Prevention Lifeline at 800-273-TALK (8255) to speak with a trained crisis counselor 24/7. A help line and other resources are also available through the National Alliance on Mental Illness at nami.org.

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What is the most important information I should know about carbamazepine?
Bipolar disorder requires long-term treatment. Do not stop taking carbamazepine, even when you feel better. With input from you, your health care provider will assess how long you will need to take the medicine. Missing doses of carbamazepine may increase your risk for a relapse in your mood symptoms.

Do not stop taking carbamazepine or change your dose without talking to with your healthcare provider first.

In order for carbamazepine to work properly, it should be taken every day as ordered by your healthcare provider.

Periodically, your healthcare provider may ask you to provide a blood sample to make sure the appropriate level of medication is in your body and to assess for side effects, such as changes in blood cell counts.

Are there specific concerns about carbamazepine and pregnancy?
If you are planning on becoming pregnant, notify your healthcare provider so that he/she can best manage your medications. People living with bipolar disorder who wish to become pregnant face important decisions. It is important to discuss the risks and benefits of treatment with your doctor and caregivers.

Carbamazepine has been associated with an increased risk of defects of the head and face, fingernails, and developmental delay. There may be precautions to decrease the risk of this effect. Do not stop taking carbamazepine without first speaking to your healthcare provider. Discontinuing mood stabilizer medications during pregnancy has been associated with a significant increase in symptom relapse.

Regarding breast-feeding, caution is advised since carbamazepine does pass into breast milk. Talk with your doctor about whether or not it is safe to breastfeed while taking carbamazepine.

What should I discuss with my healthcare provider before taking carbamazepine?
- Symptoms of your condition that bother you the most
- If you have thoughts of suicide or harming yourself
- Medications you have taken in the past for your condition, whether they were effective or caused any adverse effects
- If you experience side effects from your medications, discuss them with your provider. Some side effects may pass with time, but others may require changes in the medication.
- Any other psychiatric or medical problems you have
- All other medications you are currently taking (including over the counter products, herbal and nutritional supplements) and any medication allergies you have
- Other non-medication treatment you are receiving, such as talk therapy or substance abuse treatment. Your provider can explain how these different treatments work with the medication.
- If you are pregnant, plan to become pregnant, or are breast-feeding
- If you drink alcohol or use illegal drugs

How should I take carbamazepine?
Carbamazepine is usually taken 2-4 times per day with or without food.

Typically patients begin at a low dose of medicine and the dose is increased slowly over several weeks.

The dose usually ranges from 200 mg to 1600 mg each day, but some patients may require more based on symptoms. Only your healthcare provider can determine the correct dose for you.

Carbamazepine suspension: Measure with a dosing spoon or oral syringe, which you can get from your pharmacy.

Extended-release capsules: Swallow whole or sprinkle onto food, such as applesauce or pudding and eat immediately. Do not chew the sprinkle capsule or contents.

Use a calendar, pillbox, alarm clock, or cell phone alert to help you remember to take your medication. You may also ask a family member a friend to remind you or check in with you to be sure you are taking your medication.
What happens if I miss a dose of carbamazepine?
If you miss a dose of carbamazepine, take it as soon as you remember, unless it is closer to the time of your next dose. Discuss this with your healthcare provider. Do not double your dose or take more than what is prescribed.

What should I avoid while taking carbamazepine?
Avoid drinking alcohol or using illegal drugs while you are taking carbamazepine. They may decrease the benefits (e.g., worsen your condition) and increase adverse effects (e.g., sedation) of the medication.

Avoid consuming large quantities (8 ounces or more) of fresh grapefruit juice, as this can increase levels of carbamazepine and increase your risk of side effects or rash.

What happens if I overdose with carbamazepine?
If an overdose occurs call your doctor or 911. You may need urgent medical care. You may also contact the poison control center at 1-800-222-1222.

A specific treatment to reverse the effects of carbamazepine does not exist.

What are the possible side effects of carbamazepine?

**Common side effects**
- Dizziness or drowsiness
- Unsteadiness when standing or walking
- Nausea or vomiting
- Dry mouth
- Constipation
- Blurry or double vision

**Rare/Serious side effects**
Carbamazepine can cause a decrease in the body's sodium level. Some signs of low sodium include nausea, tiredness, lack of energy, headache, confusion, or more frequent or more severe seizures.

Carbamazepine may cause rare but serious blood problems including low white blood cell counts. Symptoms may include: fever, sore throat, or other infections that come and go or do not go away, easy bruising, red or purple spots on your body, bleeding gums or nose bleeds, or severe fatigue or weakness. Your doctor will occasionally order blood work to monitor for this.

In rare cases (<1%) a severe, spreading rash with blistering of the skin in patches over the entire body along with fever, headache and cough can occur (Stevens-Johnson syndrome). Although this is rare with carbamazepine, discontinuation of this medication is necessary. Rare cases of severe allergic reactions have been reported. Symptoms include swelling of the face, eyes, lips, or tongue, difficulty swallowing or breathing. If you experience any of these side effects, it is important to seek medical care immediately.

Studies have found that individuals who take antiepileptic medications including carbamazepine have suicidal thoughts or behaviors up to twice as often than individuals who take placebo (inactive medication). These thoughts or behaviors occurred in approximately 1 in 500 patients taking the antiepileptic class of medications. If you experience any thoughts or impulses to hurt yourself, you should contact your doctor immediately.

**Are there any risks for taking carbamazepine for long periods of time?**
To date, there are no known problems associated with long term use of carbamazepine. It is a safe and effective medication when used as directed.

It is important to note that some of the side effects listed above (particularly changes in blood sodium, rash, and suicidal thoughts) may continue to occur or worsen if you continue taking the medication. It is important to follow up with your doctor for blood work and to contact your doctor immediately if you notice any skin rash or changes in mood or behavior.
What other medications may interact with carbamazepine?

The following medications may **increase** the level and effects of carbamazepine:

- The mood stabilizer and antiseizure medication valproic acid/divalproex (Depakote®)
- Certain antibiotics, such as ciprofloxacin (Cipro®), erythromycin (Ery-tab®), clarithromycin (Biaxin®)
- Medications for heartburn or reflux, such as cimetidine (Tagamet®) and omeprazole (Prilosec®)
- Antifungal medications, such as ketoconazole (Nizoral®), fluconazole (Diflucan®), itraconazole (Sporanox®), voriconazole (Vfend®)
- Certain heart medications, such as diltiazem (Cardizem®) or verapamil (Calan®, Isoptin®)
- Certain medications used for mood or sleep, such as trazodone (Desyrel®) or nefazodone (Serzone®)

The following medications may **decrease** the level and effect of carbamazepine:

- Phenytoin (Dilantin®), phenobarbital, primidone (Mysoline®)
- Rifampin (Rifadin®)

Carbamazepine may **decrease** the level and effects of:

- Oral contraceptives
- Certain medications used for psychiatric disorders, such as lurasidone (Latuda®), aripiprazole (Abilify®), alprazolam (Xanax®), escitalopram (Lexapro®), trazodone (Desyrel®), and nefazodone (Serzone®)
- Certain heart medications, such as diltiazem (Cardizem®) or verapamil (Calan®, Isoptin®)
- Anti-rejection medications used in organ transplants, like tacrolimus (Prograf®) and cyclosporine (Neoral®, Sandimmune®)
- Certain cholesterol medications, like simvastatin (Zocor®), atorvastatin (Lipitor®)
- The blood thinner warfarin (Coumadin®)
- Antiseizure medications like phenytoin (Dilantin®), phenobarbital, and valproic acid/divalproex (Depakote®, Lamictal®)

**How long does it take for carbamazepine to work?**

It is very important to tell your doctor how you feel things are going during the first few weeks after you start taking carbamazepine. It will probably take several weeks to see big enough changes in your symptoms to decide if carbamazepine is the right medication for you.

Mood stabilizer treatment is generally needed lifelong for persons with bipolar disorder. Your doctor can best discuss the duration of treatment you need based on your symptoms and illness.

**Summary of Black Box Warnings**

**Serious Skin Reactions and HLA-B*1502 Allele**

Serious and sometimes fatal skin reactions have been reported with carbamazepine use. These reactions may be accompanied by mucous membrane ulcers, fever, or painful rash. Seek medical care immediately at the first sign of rash, as treatment must be stopped to avoid progression of the rash. These reactions are estimated to occur in 1 to 6 per 10,000 new users in countries with mainly Caucasian populations, but the risk in some Asian countries is estimated to be about 10 times higher. HLA-B*1502 is found almost exclusively in patients with ancestry across broad areas of Asia. Patients with ancestry in genetically at-risk populations should be screened for the presence of HLA-B*1502 prior to initiating treatment with carbamazepine.

**Aplastic Anemia and Agranulocytosis**

Carbamazepine has been associated with a condition where the body does not make enough new blood cells and also with a decrease in white blood cells. People taking carbamazepine can be at an increased risk of infection if white blood cell counts drop too low.

**Important Disclosure:** This information is being provided as a community outreach effort of the American Association of Psychiatric Pharmacists. This information is for educational and informational purposes only and is not medical advice. This information contains a summary of important points and is not an exhaustive review of information about the medication. Always seek the advice of a physician or other qualified medical professional with any questions you may have regarding medications or medical conditions. Never delay seeking professional medical advice or disregard medical professional advice as a result of any information provided herein. The American Association of Psychiatric Pharmacists disclaims any and all liability alleged as a result of the information provided herein.