

Pramipexole

From exercise to Prozac, nearly all treatments for depression share this in common: They improve dopamine transmission in the brain. Dopamine is responsible for motivation and drive. It allows us to feel pleasure and to feel that life is meaningful and rewarding. Antidepressants and exercise improve dopamine indirectly, but one medication addresses it head-on.

Pramipexole (Mirapex) is a dopamine agonist with unique benefits in depression. Although it is well studied for depression, we did not learn about its antidepressant effects until it was generic. By that time, there was no commercial interest in pursuing FDA approval for pramipexole. It is FDA-approved for other dopamine-related disorders: restless leg syndrome and Parkinson's disease.

Pramipexole can work when other antidepressants have not, and it even worked in people who did not respond to electroconvulsive therapy (ECT). It is generally well tolerated and avoids many of the side effects associated with antidepressants. It does not cause weight gain, restlessness, sexual dysfunction, or apathy, but it does have side effects of its own that are discussed below.

Pramipexole is non-addictive. Besides increasing dopamine transmission, it is also neuroprotective, meaning it strengthens dopamine neurons.

There are two other dopamine agonists in this class: ropinirole (Requip) and rotigotine (Neupro). These two have not been studied as extensively in depression as pramipexole but may be good options if pramipexole helped you but caused problematic side effects. The information below applies generally to all three medications in this class.

How should I take it?

Most people take pramipexole at night because it is sedating, but a few feel more activated on it and take it in the morning.

What if I forget a dose?

Take the missed dose as soon as you remember

Key Points

1. Pramipexole can cause drowsiness and is usually taken at night.
2. Nausea is the most common side effect. It may carry risks in heart disease.
3. Unlike traditional antidepressants, it work directly through dopamine. It takes 2-6 weeks to work.
4. Pay attention to dose (mg) on your tablet, as this will likely change in your second prescription and we will need to know which size you are taking.

it. However, if it is almost time for the next dose, skip the missed dose and continue your regular dosing schedule. Do not take a double dose to make up for a missed one.

How long do I need to take it?

There are two reasons to take pramipexole: to treat current symptoms and to prevent the return of symptoms. These two reasons will be different in each condition, and in many cases the decision to continue or stop it will be a personal one.

What happens if I stop it?

Dopamine agonists do not have serious withdrawal problems. You may experience restless legs if stopped abruptly, and there is a risk of depression returning if it is stopped.

Side effects

The most common side effects were nausea and fatigue. Usually taking the medication at night will reduce the fatigue, and pramipexole usually improves sleep quality. There have been cases of people falling asleep during the day after taking pramipexole and you should drive with caution after starting it. Rarely, people have insomnia on it.

The nausea usually gets better with time or can be reduced with medications for nausea if needed. Ginger can reduce nausea and is available in capsule form (e.g. Nature's Way on Amazon, check under *Antidotes for Side Effects* at chrisaikenmd.com/supplements; the dosage is 1,000-2,000mg per day). Call your clinician if unable to tolerate the nausea as there may be prescription options to reduce it.

Rarely, pramipexole has been associated with impulsive gambling and hallucinations (hearing things or seeing things). These side effects have generally only occurred in people with Parkinson's disease (this condition usually impairs the brain in many ways and makes side effects more troublesome). Pramipexole does not cause weight gain, sexual side effects and has no significant interactions with other drugs.

A rare medical side effect is swelling of the legs (edema) which improves when the drug is stopped. Pramipexole may not be safe in heart disease; this subject is controversial but some data suggest a risk of heart failure on the medication.

As you are starting the medicine, use caution when driving or performing tasks that require alertness. This should not be a problem once you have adjusted to the medicine and know how it affects you.

Pregnancy: Dopamine agonists have not been adequately evaluated during pregnancy. It is secreted in breast milk.

Interactions

Dopamine agonists have few significant interactions. If you are starting a new drug you can check for interactions at:

reference.medscape.com/drug-interactionchecker

How to store and dispose of medication

- Keep out of the reach of children.
- Store away from heat, direct light and damp places.
- To safely dispose of unwanted pills: Do not pour in the toilet or sink (it will enter the water supply). To prevent children or pets from eating it, mix unwanted pills in a bag with a little water and inedible trash (such as coffee grounds or kitty litter) and throw in the trash.

Cost and insurance coverage

Pramipexole and ropinirole are available in generic form. If you are paying out-of-pocket, you can find the lowest cost through goodrx.com. Rotigotine is only available in branded form.

—Chris Aiken, MD, updated 8/5/2024