What is iloperidone and what does it treat?

Iloperidone is a medication that works in the brain to treat schizophrenia. It is also known as a second generation antipsychotic (SGA) or atypical antipsychotic. Iloperidone rebalances dopamine and serotonin to improve thinking, mood, and behavior.

Symptoms of schizophrenia include:

- Hallucinations – hearing or seeing things that feel real but others do not hear or see
- Delusions - beliefs that are not true (e.g., other people are reading your thoughts)
- Disorganized thinking - trouble organizing your thoughts and making sense
- Little desire to be around other people
- Trouble speaking clearly
- Lack of motivation

Iloperidone may help some or all of these symptoms.

Iloperidone may also be helpful when prescribed “off-label” for other mental health conditions. “Off-label” means that it has not 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.

What is the most important information I should know about iloperidone?

Schizophrenia requires long-term treatment. Do not stop taking iloperidone, even when you feel better.

With input from you, your health care provider will assess how long you will need to take the medication.

Missing doses of iloperidone may increase your risk for a relapse (or return/worsening) of your symptoms.

Do not stop taking iloperidone or change your dose without talking with your health care provider first.

For iloperidone to work properly, it should be taken every day as ordered by your health care provider.
Are there specific concerns about iloperidone and pregnancy?
If you are planning on becoming pregnant, notify your health care provider to best manage your medications. People living with schizophrenia who wish to become pregnant face important decisions. This is a complex decision since untreated schizophrenia has risks to the fetus, as well as the mother. It is important to discuss the risks and benefits of treatment with your doctor and caregivers.

Antipsychotic use during the third trimester of pregnancy has a risk for abnormal muscle movements (extrapyramidal symptoms [EPS]) and/or withdrawal symptoms in newborns following delivery that may need to be monitored. These may resolve within hours/days without treatment or require hospitalization for monitoring/treatment.

Caution is advised with breastfeeding since there is currently no information available on whether iloperidone passes into human breast milk. In animal studies iloperidone was excreted in the milk of rats during lactation.

What should I discuss with my health care provider before taking iloperidone?
- 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 ever had muscle stiffness, shaking, tardive dyskinesia, neuroleptic malignant syndrome, or weight gain caused by a medication
- If you experience side effects from your medications as some side effects may pass with time, but others may require changes in the medication.
- Any psychiatric or medical problems you have, such as heart rhythm problems, long QT syndrome, heart attacks, diabetes, high cholesterol, or seizures
- If you have a family history of diabetes or heart disease
- 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 breastfeeding
- If you smoke, drink alcohol, or use illegal drugs

How should I take iloperidone?
Iloperidone is usually taken 2 times per day with or without food.

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

The dose usually ranges from 12 to 24 mg per day. Only your health care provider can determine the correct dose for you.

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 or 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 iloperidone?
If you miss a dose of iloperidone, take it as soon as you remember, unless it is closer to the time of your next dose. Discuss this with your health care provider. Do not double your next dose or take more than what is prescribed. If you miss more than 3 days of medication, contact your prescriber because he/she may need to adjust your dose.

What should I avoid while taking iloperidone?
Avoid drinking alcohol or using illegal drugs while you are taking iloperidone. They may decrease the benefits (e.g., worsen your symptoms) and increase adverse effects (e.g., sedation) of the medication.
What happens if I overdose with iloperidone?
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 iloperidone does not exist.

What are the possible side effects of iloperidone?

**Common side effects**
Dizziness, dry mouth, fatigue, increased heart rate, increased prolactin levels, weight gain, dry mouth

**Rare/serious side effects**
Iloperidone can cause sedation, dizziness, or orthostatic hypotension (a drop in blood pressure when standing up from sitting or lying down). These side effects may lead to falls or other injuries. This risk is higher for people with conditions or other medications that could worsen these effects. If falls or any of these symptoms occur, contact your health care provider.

Iloperidone may increase the blood levels of a hormone called prolactin. Side effects of increased prolactin levels include females losing their period, production of breast milk and males losing their sex drive or possibly experiencing erectile problems. In a few cases, iloperidone has been associated with priapism (a prolonged, often painful erection in men). Notify your health care provider if this occurs.

Iloperidone can affect the QTc interval in the heart which can lead to an irregular heartbeat (also known as arrhythmia). To minimize this risk, antipsychotic medications should be used in the smallest effective dose when the benefits outweigh the risks. Your doctor may order an EKG to monitor for irregular heartbeat.

Some people may develop muscle related side effects while taking iloperidone. The technical terms for these are “extrapyramidal symptoms” (EPS) and “tardive dyskinesia” (TD). Symptoms of EPS include restlessness, tremor, and stiffness. TD symptoms include slow or jerky movements that one cannot control, often starting in the mouth with tongue rolling or chewing movements.

Antipsychotics can also affect temperature regulation especially if you are in an area that is very hot or are exercising very heavily. While taking iloperidone, it is especially important to try to drink water to avoid dehydration.

Second generation antipsychotics (SGAs) increase the risk of weight gain, high blood sugar, and high cholesterol. This is also known as metabolic syndrome. Your health care provider may ask you for a blood sample to check your cholesterol, blood sugar, and hemoglobin A1c (a measure of blood sugar over time) while you take this medication.

- Information on healthy eating and adding exercise to decrease your chances of developing metabolic syndrome may be found at the following sites:
  - https://www.helpguide.org/articles/healthy-eating/healthy-eating.htm

Neuroleptic malignant syndrome is a rare, life threatening adverse effect of antipsychotics which occurs in <1% of patients. Symptoms include confusion, fever, extreme muscle stiffness, and sweating. If any of these symptoms occur, contact your health care provider immediately.

Are there any risks for taking iloperidone for long periods of time?
Tardive dyskinesia (TD) is a side effect that develops with prolonged use of antipsychotics. Medications such as iloperidone have been shown to have a lower risk of TD compared to older antipsychotics, such as Haldol® (haloperidol). If you develop symptoms of TD, such as grimacing, sucking, and smacking of lips, or other movements that you cannot control, contact your health care provider immediately. All patients taking either first or second generation antipsychotics should have an Abnormal Involuntary Movement Scale (AIMS) completed regularly by their health care provider to monitor for TD.

Second generation antipsychotics (SGAs) increase the risk of diabetes, weight gain, high cholesterol, and high triglycerides. (See “Serious Side Effects” section for monitoring recommendations).

What other medications may interact with iloperidone?
Iloperidone may block the effects of agents used to treat Parkinson’s disease such as levodopa/carbidopa (Sinemet®), bromocriptine, pramipexole (Mirapex®), ropinirole (Requip®), and others.
Iloperidone may lower your blood pressure. Medications used to lower blood pressure may increase this effect. Propranolol (Inderal®) is an example of this type of medication.

The following medications may increase the risk of heart problems when used with iloperidone:

- Antipsychotics, including chlorpromazine (Thorazine®), thioridizine (Mellaril®), asenapine (Saphris®), paliperidone (Invega®), quetiapine (Seroquel®), and ziprasidone (Geodon®).
- Antiarrhythmics (heart rhythm medications), including procaainamide, quinidine, amiodarone (Cordarone®), dronedarone (Multaq®), and sotalol (Betapace®).

The following medications may increase the levels and effects of iloperidone: clarithromycin (Biaxin®), fluoxetine (Prozac®), ketoconazole (Nizoral®), and paroxetine (Paxil®).

Carbamazepine (Tegretol®) may decrease the levels and effects of iloperidone.

How long does it take for iloperidone 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 iloperidone. It will probably take several weeks to see big enough changes in your symptoms to decide if iloperidone is the right medication for you.

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

- Hallucinations, disorganized thinking, and delusions may improve in the first 1-2 weeks
- Sometimes these symptoms do not completely go away
- Motivation and desire to be around other people can take at least 1-2 weeks to improve
- Symptoms continue to get better the longer you take iloperidone
- It may take 2-3 months before you get the full benefit of iloperidone

Summary of Black Box Warnings

Increased Mortality in Elderly Patients with Dementia Related Psychosis

- When used for dementia related psychosis in elderly people, both first generation (typical) and second generation (atypical) antipsychotics are associated with an increased risk of mortality.
- Although there were multiple causes of death in studies, most deaths appeared to be due to cardiovascular causes (e.g., sudden cardiac death) or infection (e.g., pneumonia).