



Loxitane (loxapine)

Generic name: Loxapine

Available strengths: 5 mg, 10 mg, 25 mg, 50 mg capsules

Available in generic: Yes

Drug class: First-generation (conventional) antipsychotic

General Information

Loxitane (loxapine) belongs to a class of antipsychotics known as the **first-generation antipsychotics**, sometimes referred to as *conventional* or *typical* antipsychotics. The first-generation antipsychotics represent an older class of antipsychotics that have been the standard for treating psychotic disorders for many decades. When compared with a newer class of **second-generation antipsychotics**, these earlier antipsychotics are referred to as *typical* or *conventional* because they lack the wider spectrum of therapeutic activity. The first-generation antipsychotics are also more likely to induce side effects that cause movement disorders, such as **extrapyramidal symptoms (EPS)** and **tardive dyskinesia (TD)**, than the newer antipsychotics.

Loxitane is an intermediate-potency antipsychotic relative to the other first-generation antipsychotics such as Thorazine (chlorpromazine) and Mellaril (thioridazine), which are low-potency agents, and Haldol (haloperidol) and Prolixin (fluphenazine), which are high-potency antipsychotics. Unlike low-potency first-generation antipsychotics, Loxitane is only mildly sedating and is less likely to lower blood pressure. Compared with the high-potency antipsychotics, Loxitane produces fewer EPS.

Although loxapine is better known by its brand name, Loxitane, it is dispensed by pharmacies primarily in generic form. Loxitane was approved by the U.S. Food and Drug Administration for treatment of psychotic disorders, including schizophrenia, schizoaffective disorder, and drug-induced psychosis. The use of a drug for its approved indications is called its *labeled use*. In clinical practice, however, physicians often prescribe drugs for *unlabeled* (“off-label”) uses when published clinical studies, case reports, or their own clinical experiences support the efficacy and safety of the medications for these uses. For instance, Loxitane may be prescribed with a mood stabilizer to treat acute mania, since the mood stabilizer has a slower onset of action. After the symptoms of mania abate, Loxitane is discontinued and the mood stabilizer is continued alone.

Dosing Information

The usual starting dosage for Loxitane is 10 mg twice a day (20 mg/day). In patients with severe symptoms, the dosage is increased rapidly over 7–10 days to a therapeutic range of 60–100 mg/day administered in divided doses of two or three times daily. Some patients with chronic schizophrenia may require dosages of

100–200 mg/day, but the dosage should not exceed 250 mg/day. When acute symptoms are stabilized, the physician may attempt to reduce the patient's dosage.

Common Side Effects

Loxitane may induce bothersome side effects known as **extrapyramidal symptoms**. Loxitane is more likely to induce EPS than are lower-potency agents. EPS are neurological disturbances caused by antipsychotics (or a neurological disorder) in the area of the brain that controls motor coordination. When disruption occurs in a particular area of the brain, it can produce symptoms that mimic Parkinson's disease (**parkinsonism**), including muscle stiffness, rigidity, tremor, drooling, and a “mask-like” facial expression. However, unlike Parkinson's disease, which is a progressive neurological disease, parkinsonism from treatment with an antipsychotic is reversible. The Parkinson-like symptoms may be treated, and prevented, by using antiparkinson agents (also called anticholinergic agents) such as Cogentin (benztropine), Benadryl (diphenhydramine), Artane (trihexyphenidyl), and Kemadrin (procyclidine).

Akathisia is another form of EPS characterized by a subjective sense of restlessness accompanied by fidgeting, inability to sit still, nervousness, muscle discomfort, and agitation. Generally, antiparkinson agents are not effective in managing akathisia. Use of Inderal (propranolol), a *beta-blocker*, may be helpful and is sometimes prescribed by physicians.

Dystonia is a type of EPS with acute onset. The patient may develop a sudden spasm of the muscles of the tongue, jaw, and neck. **This is not an allergic reaction to the antipsychotic medication.** Although a dystonic reaction may be painful and frightening, it can be rapidly reversed with an intramuscular injection of an anticholinergic medication such as Cogentin or Benadryl. With a dystonic reaction, the patient should seek immediate medical attention and receive treatment.

Elevation of **prolactin levels** is common with conventional antipsychotics. Prolactin is a hormone produced in the area of the brain called the pituitary gland. It is normally elevated in women following childbirth, stimulating lactation, or milk production. The effects of elevated prolactin include breast enlargement and milk production (**galactorrhea**) in both women and men. Elevated prolactin is associated with impotence in men and irregular menstrual cycles or absence of menstruation in women. When side effects from elevated prolactin levels become bothersome, the alternative is to switch to one of the second-generation antipsychotic agents with no propensity to elevate this hormone.

Loxitane has a moderate effect on weight gain. It is unclear whether this is due to an underlying metabolic change caused by the antipsychotic or to increased appetite. Weight should be monitored closely during therapy, and if weight gain occurs, an intervention program of diet and exercise should be started.

When a medication inhibits the action of cholinergic neurons in the nervous system, it produces an anticholinergic reaction, which may produce bothersome symptoms. Anticholinergic side effects from Loxitane may include blurred vision, dry mouth, constipation, and difficulty with urination. Seniors and individuals with a medical condition may be particularly sensitive to anticholinergic side effects. Loxitane also may block a compensatory response—the narrowing of blood vessels—that counterbalances postural change, resulting in a momentary drop in blood pressure when the person rises too rapidly, which may cause dizziness and lightheadedness. This reaction is known as **orthostatic hypotension**. Patients, especially seniors and those taking antihypertensive medications, need to be cautious and rise slowly to allow their body to adjust to the change in position, avoiding a sudden drop in their blood pressure. Orthostatic hypotension and anticholinergic side effects, which occur more frequently with low-potency, first-generation antipsychotics, are usually not as troublesome with the intermediate- and higher-potency agents.

Adverse Reactions and Precautions

Loxitane may cause **drowsiness and sedation** and impair physical coordination and mental alertness. Patients should avoid potentially dangerous activities, such as driving a car or operating machinery, until they are sure that these side effects will not affect their ability to perform these tasks.

Loxitane may enhance ultraviolet light absorption in the skin—a reaction known as **photosensitivity**—and predispose the person to sunburn. Patients should avoid prolonged exposure to sunlight, use sunscreen, and wear protective clothing until tolerance is developed to the medication.

Antipsychotics may disrupt the body's ability to regulate temperature under hot conditions. Patients may be predisposed to heat-related illness and **heatstroke** due to elevated body temperature if precautions are not taken. Patients should take precautions to protect themselves from prolonged exposure to hot, humid weather. Under very hot conditions, it is important to maintain adequate ventilation and stay indoors.

Tardive dyskinesia (TD) is a potential adverse reaction from antipsychotic medications. It is characterized by late-onset abnormal involuntary movements. TD is a potentially irreversible condition with symptoms that commonly include “pill-rolling” movements of the fingers, darting and writhing movements of the tongue, lip puckering, facial grimacing, and other irregular movements. The risk of TD is associated with the duration of exposure to antipsychotic medication, and this risk increases with age. The conventional antipsychotics are associated with a greater risk of TD than the more recent second-generation antipsychotics.

Neuroleptic malignant syndrome (NMS) is a rare, toxic reaction to antipsychotics. The symptoms are severe muscle stiffness, rigidity, elevated body temperature, increased heart rate and blood pressure, irregular pulse, and profuse sweating. NMS may lead to delirium and coma. It can be fatal if medical intervention is not immediately provided. There are no tests to predict whether an individual is susceptible to developing NMS when exposed to an antipsychotic. Thus NMS must be recognized early because it is a medical emergency that requires immediate discontinuation of the antipsychotic, hospitalization, and intensive medical treatment.

Antipsychotics can lower the seizure threshold and induce **seizures** in susceptible individuals, especially those with a history of seizure disorder. Patients with a seizure disorder who are receiving anticonvulsants often receive antipsychotics without any increase in seizures.

Use in Pregnancy and Breastfeeding: Pregnancy Category C

Loxitane has not been tested in women to determine its safety in pregnancy. The effects of the medication on the developing fetus in pregnant women are unknown. In animal studies, there was no evidence of harm to the fetus when exposed to Loxitane. Animal studies, however, are not always predictive of effects in humans. Women who are pregnant or may become pregnant should discuss this with their physician. Some women may experience a recurrence of their psychosis when they stop Loxitane. In these circumstances, the physician may discuss the need to restart the medication or seek an alternative medication or treatment.

Nursing mothers should not take Loxitane, because small amounts will pass into breast milk and be ingested by the baby. If stopping the antipsychotic is not an alternative, breastfeeding should not be started or should be discontinued.

Possible Drug Interactions

Certain medications when taken concomitantly with Loxitane may result in drug interactions and produce undesired reactions. Use of medications for lowering blood pressure (antihypertensive medications) should be monitored closely because Loxitane may lower blood pressure and produce an additive effect. Medications that act on the central nervous system (CNS), including benzodiazepines (e.g., Valium), antihistamines, and narcotic pain medications, may possibly potentiate CNS-related side effects, including somnolence, drowsiness, dizziness, and fatigue.

Patients taking Loxitane should not consume alcohol because the combination may increase drowsiness and sedation and impair thinking, judgment, and coordination.

Overdose

Depression of the CNS with deep somnolence, low blood pressure, and EPS are common signs of Loxitane overdose. More serious complications may include agitation, restlessness, convulsions, fever, arrhythmias, and coma. The risk of fatality from the overdose depends on the amount of Loxitane ingested and whether it was combined with other medications, especially CNS depressants.

Any suspected overdose should be treated as an emergency. The person should be taken to the emergency department for observation and treatment. The prescription bottle of medication (and any other medication suspected in the overdose) should be brought as well, because the information on the prescription label can be helpful to the treating physician in determining the number of pills ingested.

Special Considerations

- Do not discontinue your medication without consulting your physician.
- If you miss a dose, take it as soon as possible. If it is close to your next scheduled dose, skip the missed dose and continue on your regular dosing schedule, but do not take double doses.
- Loxitane may be taken with or without food.
- Loxitane may cause sedation and drowsiness, especially during initiation of therapy, and impair your alertness. Use caution when driving or performing tasks that require alertness.
- Loxitane may enhance ultraviolet light absorption and increase the risk of sunburn. Use a sunscreen, and avoid excessive exposure to sunlight.
- Store the medication in its originally labeled, light-resistant container, away from heat and moisture. Heat and moisture may precipitate breakdown of your medication.
- Keep your medication out of reach of children.

If you have any questions about your medication, consult your physician or pharmacist.

Notes
