CONDITION

Prochlorperazine overdose

Prochlorperazine overdose is poisoning caused by taking more prochlorperazine than the body can safely handle.

WHAT IT IS
Toxic effects from taking too much prochlorperazine

BODY SYSTEM
Nervous system, muscles, heart and circulation

MAIN SYMPTOMS
Sleepiness, muscle spasms, agitation, low blood pressure

WHAT CAUSES IT
Excess prochlorperazine from accidental or intentional use

HOW IT IS DIAGNOSED
Clinical assessment; no routine confirmatory blood test

MAIN TREATMENT
Supportive monitoring and medicines for specific symptoms

CAN IT BE CURED?
Yes - effects usually resolve with supportive care

IS IT AN EMERGENCY?
Yes - any suspected overdose needs immediate assessment

LONG-TERM OUTLOOK
Most people recover fully after acute effects resolve

Overview

Prochlorperazine is a medicine used to treat severe nausea and vomiting. It is also sometimes used for vertigo, which is a spinning sensation, and certain mental health conditions. It belongs to a group of medicines called phenothiazines.

A prochlorperazine overdose happens when someone takes more than their body can safely handle. It may follow a dosing mistake, a child swallowing the medicine, or intentional self-harm. An overdose can affect alertness, muscle control, blood pressure, breathing, and heart rhythm.

Prochlorperazine can also cause a sudden movement reaction called acute dystonia at a usual dose. Dystonia causes involuntary muscle tightening, often in the face, jaw, eyes, or neck. This does not always mean an overdose, but it still needs prompt medical assessment.

There is no single amount that causes poisoning in everyone. The likely effects depend on the amount taken, the form of the medicine, the person's health, and whether alcohol or other medicines were also taken.

Any suspected overdose should be discussed immediately with an emergency service or poison control centre. Do not wait for symptoms to appear.

Symptoms

Symptoms may begin within several hours, although timing can differ. Someone may first appear unusually sleepy, restless, confused, or unsteady.

Movement-related symptoms are especially important with prochlorperazine. These may include:

The medical term for eyes being forced upward is an oculogyric crisis . Severe restlessness with an urge to keep moving is called akathisia .

Other possible overdose symptoms include extreme sleepiness, agitation, confusion, faintness, dry mouth, blurred vision, or difficulty passing urine. Blood pressure may fall, which can cause weakness, dizziness, or collapse.

More serious poisoning may cause seizures, loss of consciousness, breathing problems, or an abnormal heart rhythm. A rare but serious reaction called neuroleptic malignant syndrome can cause high temperature, severe muscle rigidity, confusion, sweating, and unstable blood pressure or pulse.

Symptoms do not reliably show how much medicine was taken. A person who seems well soon after an overdose may still need monitoring.

- Painful neck twisting, jaw stiffness, or facial spasms
- Eyes rolling upward or becoming fixed in one direction
- Tongue protrusion, trouble speaking, or trouble swallowing
- Shaking, rigid muscles, slowed movement, or severe restlessness

Causes and risk factors

An overdose can happen after taking several doses too close together, confusing tablet strengths, or taking another dose because vomiting occurred after the first one. Prochlorperazine comes in different forms, including tablets, suppositories, and injections,

which can also contribute to dosing errors.

Children may be poisoned after finding medicine that was not securely stored. An overdose may also be taken intentionally during a period of distress.

The effects can be more serious when prochlorperazine is combined with alcohol, sleeping medicines, opioid pain medicines, sedating antihistamines like cetirizine or loratadine , or other drugs that reduce alertness or breathing. Other medicines may add to its effects on heart rhythm or blood pressure.

Age, dehydration, heart disease, and existing problems with blood pressure may affect how someone responds. However, it is not possible to decide at home that an overdose is safe based only on the amount or the absence of symptoms.

Diagnosis

There is no routinely available blood test that confirms a prochlorperazine overdose. Diagnosis is based on the circumstances, symptoms, examination, and information about what may have been taken.

The healthcare team will want to know the product name, strength, estimated amount, route, and approximate time it was taken. They will also ask about alcohol, non-prescription products, prescribed medicines, and recreational drugs. Bringing the packet or a photograph of the label can help, but treatment should not be delayed to find it.

An electrocardiogram, or ECG, records the heart's electrical activity. It can show rhythm problems or changes that increase the risk of an abnormal rhythm. Heart rate, blood pressure, breathing, temperature, oxygen level, alertness, and muscle movements may be monitored repeatedly.

Blood tests may check glucose, salts such as potassium, kidney and liver function, and muscle injury. Tests for other common poisons may be needed when the substance or amount is uncertain. Routine urine drug screens do not reliably confirm or rule out prochlorperazine poisoning.

Treatment and management

There is no specific antidote that removes or directly reverses prochlorperazine. Treatment supports breathing and circulation while the body clears the medicine. It also controls movement reactions, seizures, agitation, and other complications.

Initial care may include oxygen, intravenous fluids, heart monitoring, and repeated neurological checks. Someone who is very drowsy may need help protecting their airway. Severe breathing problems can require temporary breathing support.

Medicines can usually relieve acute dystonia. Seizures or severe agitation may be treated with medicines that calm abnormal brain activity. Treatment is chosen and monitored by the healthcare team because some medicines can worsen low blood pressure, drowsiness, or heart rhythm problems.

Activated charcoal can sometimes reduce absorption when an overdose was recent. It is not suitable for everyone, particularly if the person is drowsy and cannot protect their airway. It should only be given following specialist advice. Do not use charcoal products at home or try to make the person vomit.

Observation continues until alertness, movement, blood pressure, and heart findings are stable. The length of monitoring is based on the symptoms, formulation taken, test results, and any other substances involved.

If the overdose was intentional, care should also include a compassionate mental health assessment and a plan for immediate safety and follow-up.

Complications

Most people recover, but severe poisoning can cause complications. Marked drowsiness may allow vomit or saliva to enter the lungs. This is called aspiration and can lead to breathing problems or pneumonia.

Prolonged seizures, severe muscle spasms, or very high muscle activity can injure muscle tissue. In serious cases, damaged muscle releases substances into the blood that can affect the kidneys.

Low blood pressure can reduce blood flow to vital organs. Abnormal heart rhythms may interfere with effective circulation. Loss of consciousness can also lead to falls or other injuries.

Very severe muscle rigidity, high temperature, and altered awareness may indicate neuroleptic malignant syndrome. This requires hospital treatment. Long-term harm is uncommon after uncomplicated poisoning, but it can occur if there has been prolonged oxygen shortage, a serious rhythm disturbance, or organ injury.

Prevention

Most accidental prochlorperazine overdoses can be prevented.

Keep the medicine in its original labelled container and store it where children and other household members cannot reach it. Avoid using loose tablets in unlabelled containers. Check the strength and instructions each time, especially if the product or form has changed.

Do not take an extra dose to replace a missed or vomited dose unless a pharmacist or prescriber has confirmed that this is appropriate. Keep an up-to-date medicine list and check combination products so that sedating medicines are not taken together by mistake.

Do not share prochlorperazine. Return unwanted medicine through a pharmacy or local medicine-disposal service rather than leaving it available at home.

When there is a risk of intentional overdose, safer storage, limited access to medicines, mental health support, and a personal safety plan may reduce future risk.

Living with it and what to expect

Prochlorperazine overdose is an acute event rather than a condition that usually continues for months or years. Symptoms generally improve as the body clears the medicine and complications are treated. The exact course cannot be predicted from the amount alone.

Drowsiness and confusion may improve gradually. Muscle spasms often respond quickly to treatment, although they can return because prochlorperazine may remain active longer than the medicine used to control the reaction. New or returning spasms after discharge need prompt advice.

After an uncomplicated overdose, most people return to their previous level of health. Severe complications can lengthen recovery and may require follow-up for the heart, kidneys, lungs, muscles, or nervous system.

Routine follow-up may include reviewing how the overdose happened, correcting confusing dosing instructions, and deciding whether prochlorperazine remains suitable. After an intentional overdose, ongoing mental health care is an important part of recovery. This is separate from emergency treatment and may continue over weeks or months.

When to get medical help

Treat any suspected prochlorperazine overdose as an emergency, even if there are no symptoms. Contact your local poison control centre or emergency service immediately. Stay with the person and follow the instructions you are given.

Call emergency services at once for:

Do not drive if you are drowsy, confused, faint, or having muscle spasms. Do not induce vomiting or give food, drinks, or home remedies unless a poison specialist or emergency professional tells you to do so.

If you develop unusual eye, face, jaw, or neck movements after a normal prescribed dose, seek urgent medical advice. Breathing or swallowing difficulty makes this an emergency.

After discharge, routine follow-up is appropriate for medication review and prevention planning. Return for urgent assessment if marked sleepiness, spasms, fainting, breathing problems, fever, confusion, or a racing or irregular heartbeat develops.

- Trouble breathing, blue or grey lips, or choking
- Collapse, inability to wake, or a seizure
- Severe neck, jaw, tongue, or throat spasms
- Trouble swallowing or speaking caused by muscle tightening
- A very fast, slow, or irregular heartbeat
- High temperature with severe rigidity, confusion, or heavy sweating

Common questions

How much prochlorperazine causes an overdose?

There is no single toxic amount that applies to everyone. Tablet strength, formulation, body size, health conditions, and other substances all matter. Call a poison control centre or emergency service for an individual risk assessment rather than waiting for symptoms.

I took one extra tablet. What should I do?

Do not take another dose until you have received advice. Contact a pharmacist, poison control centre, or urgent medical service and provide the product strength, time, and amount taken. Call emergency services if you become very sleepy, faint, confused, short of breath, or develop muscle spasms.

Can prochlorperazine overdose be fatal?

Severe poisoning can affect breathing, blood pressure, temperature, and heart rhythm and can be life-threatening. Prompt monitoring and supportive treatment reduce these risks, and most people with uncomplicated poisoning recover.

Can naloxone reverse prochlorperazine overdose?

No. Naloxone reverses opioid effects and does not reverse prochlorperazine itself. Emergency teams may still use it if opioid exposure is possible, but other supportive treatment remains necessary.

How long do the symptoms last?

The duration depends on the formulation, amount, symptoms, and other substances taken. Many effects improve as the medicine is cleared, but drowsiness or movement symptoms can continue or return. Follow the observation and discharge instructions provided by the healthcare team.

Can a blood or urine test prove I took too much?

Usually not. Prochlorperazine levels are not routinely used, and common urine drug screens may not identify it reliably. Diagnosis is mainly based on the history, examination, ECG, and tests for complications or other poisons.

Sources

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