CONDITION

Cyproheptadine overdose

Cyproheptadine overdose is poisoning caused by taking more cyproheptadine than the body can safely handle.

WHAT IT IS
Toxic effects from taking too much cyproheptadine

BODY SYSTEM
Nervous system, heart, eyes, bladder, and gut

MAIN SYMPTOMS
Agitation, confusion, dry mouth, fast heartbeat

WHAT CAUSES IT
Excess cyproheptadine exposure

HOW IT IS DIAGNOSED
Exposure history, examination, ECG, and clinical monitoring

MAIN TREATMENT
Emergency monitoring and supportive care

CAN IT BE CURED?
Yes - most recover with prompt care

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

LONG-TERM OUTLOOK
Usually full recovery after acute effects resolve

Overview

Cyproheptadine is an older type of antihistamine like cetirizine or loratadine . It may be used for allergy symptoms and for certain other medical purposes. It also blocks a brain chemical called serotonin.

A cyproheptadine overdose happens when someone takes more of the medicine than their body can safely process. This may occur accidentally, through a dosing mistake, or because the medicine was taken deliberately.

Too much cyproheptadine can cause anticholinergic toxicity . This means it blocks signals from acetylcholine, a chemical that helps control alertness, body temperature, heart rate, vision, digestion, and urination. The result can be confusion, agitation, dry mouth, wide pupils, a fast heartbeat, and difficulty passing urine.

Severe poisoning can affect breathing, heart rhythm, body temperature, or consciousness. Because early symptoms do not reliably show how serious the poisoning will become, every suspected overdose needs immediate advice from a poison centre or emergency service.

Symptoms

Symptoms usually affect several parts of the body. They may develop or worsen over the first several hours after the medicine is taken.

Changes in the brain and nervous system may include:

Children may become unusually excited, restless, or confused rather than sleepy. However, either stimulation or deep drowsiness can occur at any age.

Physical signs may include:

A person may not have every symptom. The absence of obvious symptoms immediately after an extra dose does not confirm that they are safe.

- Unusual sleepiness or reduced alertness
- Restlessness, agitation, or confusion
- Disorientation or slurred speech
- Hallucinations, such as seeing or hearing things that are not present
- Poor coordination
- Tremors or jerking movements
- Seizures
- Loss of consciousness in severe cases
- Very dry mouth and skin
- Flushed or unusually warm skin
- Wide pupils and blurred vision
- Sensitivity to bright light
- Fast heartbeat
- Raised body temperature
- Difficulty urinating
- Reduced bowel movement, abdominal swelling, or vomiting

Causes and risk factors

The direct cause is taking more cyproheptadine than the body can safely handle. Situations that can lead to this include:

The effects may be harder to assess if cyproheptadine was taken with alcohol or with other medicines that cause sleepiness or anticholinergic effects. These can include some sleep medicines, motion-sickness medicines, older antidepressants like sertraline or fluoxetine , antipsychotic medicines, and other antihistamines.

Risk also relates to the amount taken, the person's age and size, underlying health, and whether other substances were involved. There is no reliable home method for deciding whether an exposure is harmless.

- A child reaching an unsecured bottle
- Taking a second dose after forgetting that one was already taken
- Confusing liquid measurements or medicine strengths
- Using a kitchen spoon instead of an oral syringe or medicine cup
- Taking medicine prescribed for somebody else
- Deliberate self-poisoning

Diagnosis

Cyproheptadine overdose is mainly diagnosed from the exposure history and the pattern of symptoms. If possible, emergency staff will need to know the product, strength, possible amount, time it was taken, and whether any other medicines or substances were involved.

An examination may check:

An electrocardiogram , or ECG, records the heart's electrical activity. It can identify an abnormal rhythm or changes in electrical conduction through the heart.

Blood tests cannot usually confirm cyproheptadine poisoning directly. They may instead check blood sugar, salts, kidney function, muscle injury, or other possible causes of the symptoms. Tests for common co-ingested substances may be needed when the history is uncertain.

Observation over time is important. A person who initially seems well may still need monitoring based on the possible dose, symptoms, ECG findings, age, and other substances taken.

- Alertness, behaviour, and pupil size

- Heart rate, blood pressure, temperature, and breathing
- Skin and mouth dryness
- Bladder and bowel function
- Signs of injury, seizures, or muscle breakdown

Treatment and management

Treatment takes place under poison-centre or emergency medical guidance. There is no safe home treatment for a suspected overdose.

Immediate care focuses on the airway, breathing, circulation, temperature, and level of consciousness. Monitoring may include repeated vital signs, ECGs, and checks of urine output and mental state.

Supportive treatments can include:

Activated charcoal may sometimes reduce absorption if the exposure was recent. It is not suitable for everyone, especially if the person is very sleepy, vomiting, seizing, or unable to protect their airway. It should only be given when a poison specialist or emergency clinician recommends it.

Physostigmine is a medicine that can reverse severe anticholinergic delirium in carefully selected cases. It is not routine treatment and can be unsafe in some poisonings or with certain ECG abnormalities. Its use requires experienced toxicology guidance and close monitoring.

Do not make the person vomit. Do not give food, drink, charcoal, or another medicine unless a poison centre or emergency professional tells you to do so.

- Oxygen or breathing support when needed
- Intravenous fluids for low blood pressure or dehydration
- Medicines to control severe agitation or seizures
- External cooling for a dangerously raised temperature
- Treatment for abnormal heart electrical conduction
- Bladder drainage if severe urinary retention develops

Complications

Most people recover with timely assessment and supportive care, but severe poisoning can lead to complications.

Possible complications include:

Difficulty urinating can cause painful bladder swelling. Reduced gut movement may cause abdominal discomfort or swelling.

Complications are more likely when a large amount was taken, treatment was delayed, or several medicines were involved. Serious symptoms are not inevitable, but they cannot be ruled out safely at home.

- Seizures or prolonged loss of consciousness
- Breathing problems or inhaling vomit into the lungs
- Dangerous overheating
- Abnormal heart rhythms or very low blood pressure
- Injury during confusion or agitation
- Muscle breakdown after seizures or extreme agitation
- Kidney injury related to muscle breakdown, overheating, or low blood pressure

Prevention

Cyproheptadine overdose can often be prevented. Store the medicine locked away, out of sight and reach of children. Child-resistant packaging helps, but it is not fully childproof.

Keep cyproheptadine in its original labelled container. Avoid moving tablets or liquid into unmarked bottles, cups, or food containers.

For liquid medicine, use the supplied measuring device or an oral syringe. A household teaspoon may hold an unreliable amount.

A written schedule, pill organiser, or medication reminder can reduce double dosing. Check the label before each dose, especially when more than one caregiver gives medicine. Do not share prescription medicine.

Ask a pharmacist or poison centre what to do after a missed or accidental extra dose. Do not automatically take another dose to make up for one that was missed.

If someone has taken medicine deliberately to harm themselves, reducing access to unsecured medicines is part of ongoing safety planning. Mental health support can also help address the reasons behind the overdose.

Living with it and what to expect

Cyproheptadine overdose is usually an acute event rather than a long-term condition. Symptoms often improve as the medicine leaves the body, although the timing differs according to the exposure and the person's condition.

Someone with mild symptoms may need observation until they remain alert, have stable vital signs, and show no concerning ECG changes. More serious poisoning may require hospital admission or intensive monitoring.

After an uncomplicated recovery, ongoing physical problems are not usually expected. Follow-up may be needed if confusion, weakness, urinary problems, breathing symptoms, or other changes continue after discharge.

A routine follow-up appointment may be used to review how the overdose happened, correct dosing or storage problems, and decide whether cyproheptadine should be continued. This is different from emergency care for new or worsening symptoms.

When an overdose was deliberate, assessment and mental health support are important before and after discharge. Recovery includes both physical safety and support for the distress that led to the event.

When to get medical help

Treat any suspected cyproheptadine overdose as urgent, even if the person currently feels well.

In the United States, call Poison Help at 1-800-222-1222 . Elsewhere, contact your local poison centre or emergency medical service. Have the medicine container available, but do not delay the call while searching for it.

Call emergency services immediately if the person:

Do not leave an unconscious or severely confused person alone. If they are unconscious but breathing, place them on their side if you can do so safely. Do not put anything in their mouth during a seizure.

After hospital discharge, seek urgent reassessment for worsening confusion, fainting, breathing difficulty, persistent vomiting, inability to urinate, severe muscle pain, or dark urine. Routine follow-up is appropriate for medication review or storage planning when no urgent symptoms are present.

- Has a seizure

- Is difficult to wake or loses consciousness
- Has trouble breathing
- Is severely confused, aggressive, or hallucinating
- Has a very fast or irregular heartbeat
- Feels extremely hot or has hot, dry skin
- Collapses or cannot stand safely
- May have taken cyproheptadine deliberately

Common questions

What should I do if I accidentally took an extra cyproheptadine dose?

Call a poison centre for advice based on your age, medicine strength, amount, timing, symptoms, and other medicines. Do not wait for symptoms or try to make yourself vomit.

How long does cyproheptadine overdose last?

The course depends on the amount taken, whether other substances were involved, and how quickly treatment begins. Effects may continue beyond the first few hours, so a symptom-free period at home does not replace poison-centre advice.

Can cyproheptadine overdose cause hallucinations?

Yes. Its anticholinergic effects can cause confusion, agitation, disorientation, and visual or auditory hallucinations. These symptoms require urgent medical assessment.

Is there an antidote for cyproheptadine overdose?

Most treatment is supportive. Physostigmine can reverse severe anticholinergic delirium in selected cases, but it has important risks and is only used with specialist guidance and heart monitoring.

Can I sleep after taking too much cyproheptadine?

Do not simply go to sleep without first contacting a poison centre or emergency service. Increasing sleepiness can be part of the poisoning and may make a worsening condition harder to recognize.

Will there be permanent damage?

Most people recover fully after the acute effects resolve. Permanent harm is possible after severe complications such as prolonged seizures, lack of oxygen, extreme overheating, or major heart problems, but these are not expected in every overdose.

Sources

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