CONDITION

Thioridazine overdose

Thioridazine overdose is poisoning caused by taking enough thioridazine to disrupt the heart, brain, blood pressure, or breathing.

WHAT IT IS
Poisoning from too much thioridazine

BODY SYSTEM
Heart and circulation, nervous system, and breathing

MAIN SYMPTOMS
Sleepiness, abnormal heartbeat, low blood pressure, seizures

WHAT CAUSES IT
Excess thioridazine, sometimes combined with other substances

HOW IT IS DIAGNOSED
Clinical assessment, ECG, blood tests, and exposure history

MAIN TREATMENT
Emergency monitoring and supportive hospital care

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

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

LONG-TERM OUTLOOK
Often full recovery, but severe heart toxicity can be fatal

Overview

Thioridazine is an antipsychotic medicine. It changes the effects of certain chemical messengers in the brain. Because it can cause dangerous changes in heart rhythm, its use is limited and requires careful medical supervision.

A thioridazine overdose happens when someone takes more than their body can safely process. It may be accidental, such as taking repeated doses, or intentional. Serious poisoning can also occur when thioridazine is combined with medicines or substances that increase its level or affect the heart.

The main concern is electrical disruption of the heart. Thioridazine can prolong the time the heart takes to reset between beats, shown on an electrocardiogram as a prolonged QT interval . This may lead to a dangerous rhythm called torsades de pointes , in which the lower chambers

of the heart beat rapidly and cannot pump blood effectively.

An overdose can also cause severe sleepiness, confusion, seizures, low blood pressure, breathing problems, and coma. There is no specific antidote, but hospital treatment can support the heart, breathing, and circulation while the body clears the medicine.

Suspected thioridazine overdose is an emergency even if the person initially feels well. Heart rhythm changes may not cause obvious early symptoms.

Symptoms

Symptoms may begin with drowsiness, dizziness, dry mouth, or blurred vision. More serious effects can develop as the amount absorbed increases.

Possible symptoms include:

Some symptoms result from anticholinergic effects . This means the medicine blocks signals involved in saliva production, vision, urination, bowel movement, and temperature control.

A person with a dangerous heart rhythm may feel palpitations, dizziness, shortness of breath, or chest discomfort. They may also faint without warning. In some cases, an abnormal rhythm is found on monitoring before the person notices anything.

- Marked sleepiness, confusion, agitation, or loss of consciousness
- Fast, slow, irregular, or forceful heartbeat
- Dizziness, weakness, fainting, or collapse from low blood pressure
- Slow, shallow, or difficult breathing
- Seizures
- Muscle stiffness, unusual movements, tremor, or restlessness
- Dry mouth, flushed skin, enlarged pupils, or blurred vision
- Difficulty urinating or reduced bowel movement
- Nausea or vomiting
- Body temperature that is unusually high or low

Causes and risk factors

The direct cause is taking a toxic amount of thioridazine. The amount that causes severe poisoning is not the same for everyone, so it is unsafe to judge risk from the number of tablets

alone.

Overdose may happen because of:

Risk may be greater in someone with existing heart disease, a naturally prolonged QT interval, or low blood levels of potassium or magnesium. Liver problems may slow the breakdown of thioridazine. Differences in how the body processes the medicine can also raise its concentration.

Many medicines can interact with thioridazine. These include some antidepressants like sertraline or fluoxetine , antibiotics like amoxicillin or doxycycline , heart medicines, and other antipsychotics like olanzapine or risperidone . This is not a complete list, so a pharmacist or prescriber should review all prescription medicines, non-prescription products, and supplements.

- Taking an extra dose or repeating a dose after forgetting it was taken
- Confusing thioridazine with another medicine
- A child or other household member accessing the tablets
- Intentional self-poisoning
- Combining it with alcohol, sedatives, or other medicines
- Taking medicines that raise thioridazine levels or also disturb heart rhythm

Diagnosis

Emergency clinicians diagnose thioridazine poisoning from the circumstances, symptoms, examination, and test results. If possible, information about the tablet strength, estimated number taken, time of exposure, and other substances is helpful. Treatment should not be delayed if those details are unknown.

An ECG , or electrocardiogram, records the heart's electrical activity. It can show QT prolongation, slowed electrical conduction, or an abnormal rhythm. ECG monitoring is usually continued because changes can develop or return as the medicine is absorbed and cleared.

Blood tests may check:

A blood concentration of thioridazine is not usually available quickly enough to guide emergency treatment. A routine drug screen may also fail to identify it reliably. Clinicians therefore base decisions mainly on the person's condition and ECG rather than waiting for a specific drug level.

- Potassium, magnesium, and other salts that affect heart rhythm

- Blood sugar
- Kidney and liver function
- Acid levels and oxygen or carbon dioxide when breathing is affected
- Evidence of other common or suspected overdoses

Treatment and management

Thioridazine overdose is treated in an emergency department, often with advice from a clinical toxicologist or poison centre. There is no medicine that directly reverses all its effects.

Initial care focuses on the airway, breathing, circulation, and heart rhythm. Treatment may include oxygen, intravenous fluids, and continuous monitoring. A breathing tube and ventilator may be needed if the person cannot protect their airway or breathe adequately.

Activated charcoal can bind some medicine in the digestive tract. A medical team may consider it soon after an overdose when it can be given safely. It is not suitable for everyone, especially when severe drowsiness or seizures make choking more likely. Do not try to cause vomiting.

Low blood pressure is usually treated first with intravenous fluids. If it remains dangerously low, clinicians may use medicines that support blood vessel tone and circulation.

Abnormal heart rhythms are treated according to the ECG pattern and the person's condition. This may involve correcting potassium or magnesium levels, giving intravenous magnesium for torsades de pointes, or using electrical treatment for an immediately life-threatening rhythm. Certain heart-rhythm medicines can worsen QT prolongation, so treatment requires toxicology and cardiac expertise.

Seizures and severe agitation may be controlled with sedating anticonvulsant medicines. Temperature problems, muscle injury, and reduced urine output are treated as needed.

Observation continues until the person is awake and medically stable, with safe blood pressure and reassuring heart tests. The required monitoring period is based on symptoms, ECG findings, the exposure, and any other substances taken.

Complications

The most serious complication is a life-threatening ventricular arrhythmia, meaning an abnormal rhythm beginning in the lower chambers of the heart. This can stop effective blood flow and lead to cardiac arrest.

Other possible complications include:

Severe complications are not inevitable. Prompt monitoring matters because many problems can be treated before they cause lasting harm.

- Injury from fainting or seizures
- Vomit entering the lungs, called aspiration
- Respiratory failure
- Shock from very low blood pressure
- Brain injury if oxygen or circulation is interrupted
- Muscle breakdown after prolonged seizures or unconsciousness
- Kidney injury related to shock or muscle breakdown

Prevention

Most accidental thioridazine overdoses can be prevented, although not every medication error is avoidable.

Take thioridazine only as shown on the current prescription label. If a dose is missed or you are unsure whether it was taken, check the written instructions or contact a pharmacist rather than taking another dose automatically.

Keep the medicine in its original, labelled container. Store it locked away from children and from anyone who may take it by mistake. Pill organisers can help some people, but they should still be kept secure.

Before starting any new prescription medicine, non-prescription product, or supplement, tell the pharmacist or prescriber that you take thioridazine. Do not share the medicine with anyone else.

Return unwanted tablets through a pharmacy or approved medicine take-back programme when available. Do not keep old supplies "just in case."

If there is concern that someone may use medicines to harm themselves, reducing access to large quantities and arranging prompt mental health support can lower immediate risk.

Living with it and what to expect

Thioridazine overdose is an acute poisoning, not usually a long-term illness. Its course is measured mainly over hours and days while the medicine is absorbed, processed, and removed

from the body.

People with mild effects may need monitoring until their symptoms and ECG findings have settled. More severe poisoning may require intensive care, breathing support, or treatment for an abnormal rhythm. Recovery time cannot be predicted from the tablet count alone.

Many people who recover without cardiac arrest, prolonged low oxygen, or another major complication do not have lasting effects from the poison itself. Severe interruption of blood flow or oxygen can cause longer-term heart, brain, kidney, or muscle problems and may require follow-up.

Before discharge, the medical team may review why the overdose happened and whether thioridazine remains appropriate. Do not restart it unless the treating team or regular prescriber has given clear instructions.

After an accidental overdose, follow-up may focus on medication organisation and possible interactions. After intentional self-poisoning, care should also address the distress or mental health problem that led to the event. This support is part of treatment, not a punishment.

When to get medical help

Call emergency services now if thioridazine overdose is known or suspected. Do not wait for symptoms, and do not drive an unwell person to hospital yourself.

Emergency warning signs include:

If the person is unconscious but breathing, place them on their side if you can do so safely. If they are not breathing normally, begin CPR if you know how and follow the emergency dispatcher's instructions.

Do not make the person vomit. Do not give food, drink, or home remedies unless a poison specialist tells you to. Bring the medicine container and information about any other substances to the hospital.

For a possible extra dose without symptoms, contact a poison centre immediately for case-specific advice. In the United States, Poison Control is available at 1-800-222-1222 . Elsewhere, use your local poison information service. Call emergency services instead if symptoms are present or the exposure was intentional.

Routine follow-up is appropriate after emergency care if the person remains stable but needs medication review, repeat heart testing, or mental health support. New fainting, palpitations, seizures, severe drowsiness, or breathing trouble remains an emergency.

- Fainting, collapse, or inability to wake

- A fast or irregular heartbeat
- A seizure
- Slow, shallow, or difficult breathing
- Severe confusion or agitation
- Chest discomfort or marked dizziness
- Blue, grey, or unusually pale lips or skin

Common questions

Can one extra thioridazine tablet cause an overdose?

The risk cannot be judged safely without knowing the tablet strength, prescribed dose, other medicines, health conditions, and timing. Contact a poison centre or healthcare professional promptly rather than waiting for symptoms. Call emergency services if any symptoms occur.

How long does thioridazine overdose last?

Effects may continue while the medicine and its active breakdown products remain in the body. The course can be longer when a large amount was taken, absorption is delayed, or the liver processes the medicine slowly. ECG monitoring helps determine when the immediate danger has passed.

Can thioridazine overdose stop the heart?

It can cause dangerous rhythms that prevent the heart from pumping effectively. This is why suspected overdose needs emergency ECG monitoring, even when the person is awake and has no palpitations.

Is there an antidote for thioridazine?

There is no specific antidote. Treatment supports breathing, blood pressure, and heart function while addressing seizures, abnormal rhythms, and electrolyte problems.

Will activated charcoal help at home?

Do not use activated charcoal at home unless a poison specialist specifically directs you. A drowsy or vomiting person can inhale it into the lungs. Hospital clinicians decide whether its possible benefit outweighs that risk.

Can someone recover fully from thioridazine overdose?

Full recovery is possible, especially when serious complications are prevented or treated quickly. Lasting problems are more likely after cardiac arrest, prolonged low blood pressure,

severe breathing failure, or another major complication.

Sources

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