CONDITION

Ketoprofen overdose

Ketoprofen overdose is poisoning caused by taking more ketoprofen than the body can safely process.

WHAT IT IS
Harmful effects from taking too much ketoprofen

BODY SYSTEM
Digestive system, kidneys, brain, heart and circulation

MAIN SYMPTOMS
Nausea, stomach pain, drowsiness, breathing problems

WHAT CAUSES IT
Taking more ketoprofen than the body can safely handle

HOW IT IS DIAGNOSED
Exposure history, examination, and blood and urine tests

MAIN TREATMENT
Monitoring and supportive care in a medical setting

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

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

LONG-TERM OUTLOOK
Often full recovery; severe poisoning may cause lasting organ damage

Overview

Ketoprofen overdose happens when someone takes more ketoprofen than their body can safely process. This may be accidental or intentional. It can also happen when several medicines containing similar ingredients are taken together.

Ketoprofen is a nonsteroidal anti-inflammatory drug like ibuprofen or naproxen , or NSAID. It reduces pain and inflammation by blocking substances called prostaglandins. Prostaglandins also help protect the stomach lining, maintain blood flow through the kidneys, and support normal blood clotting. An overdose can therefore affect several parts of the body.

Most small overdoses cause mild symptoms, such as nausea, stomach pain, or drowsiness. Larger overdoses can cause bleeding, kidney injury, seizures, low blood pressure, abnormal acidity in the blood, or difficulty breathing. The exact risk cannot be judged from symptoms

alone.

There is no specific antidote for ketoprofen. Treatment focuses on observation and supporting breathing, circulation, kidney function, and other body systems while the medicine is cleared.

If you think an overdose may have happened, contact a poison information service or emergency medical service immediately. Do not wait for symptoms to appear.

Symptoms

Symptoms often involve the digestive system and brain. They may begin with:

Stomach irritation can sometimes lead to bleeding. Possible signs include vomit containing blood or dark material that resembles coffee grounds. Bowel movements may become black and sticky.

An overdose can reduce blood flow through the kidneys. This may cause much less urine than usual, swelling, or abnormal kidney blood tests. Early kidney injury may not cause obvious symptoms.

Severe poisoning is less common but may cause agitation, extreme sleepiness, seizures, loss of consciousness, slow or difficult breathing, or low blood pressure. The blood may become too acidic, a problem called metabolic acidosis. This can contribute to fast or deep breathing, confusion, and poor circulation.

Symptoms can be delayed, especially if an extended-release product was taken. A person who initially feels well may still need assessment and monitoring.

- Nausea or vomiting
- Upper stomach pain or indigestion
- Dizziness, headache, or ringing in the ears
- Unusual tiredness, confusion, or drowsiness

Causes and risk factors

The direct cause is taking more ketoprofen than the body can safely handle. This can result from misunderstanding the label, repeating a dose, mixing up medicines, or a child gaining access to the container. Some overdoses are intentional.

The risk of serious poisoning is influenced by the amount taken, the strength and formulation, the person's body size, and the time since exposure. Extended-release capsules may continue

releasing medicine for many hours.

Health conditions and other substances may also affect the risk. Important factors include:

Combining ketoprofen with another NSAID does not simply provide stronger pain relief. It increases the chance of harmful effects, including stomach bleeding and kidney injury.

- Kidney disease, dehydration, or significant fluid loss
- Older age or frailty
- A history of stomach ulcers or digestive bleeding
- Taking other NSAIDs, such as ibuprofen or naproxen
- Taking medicines that affect bleeding or kidney function
- Alcohol or other drugs taken at the same time

Diagnosis

There is no routine blood test that confirms ketoprofen overdose or reliably predicts how severe it will become. Diagnosis is mainly based on what was taken, the amount that may be missing, the time of exposure, symptoms, and examination findings.

The healthcare team will try to identify the exact product. The strength, number of tablets or capsules, and whether it was immediate-release or extended-release all matter. They will also ask about alcohol, prescription medicines, nonprescription products, and other possible substances.

Checks may include heart rate, blood pressure, breathing rate, oxygen level, temperature, alertness, and urine output. An electrocardiogram, or ECG, may be used to check the heart rhythm, especially when another substance could have been taken.

Blood tests can assess kidney function, salts in the blood, blood cell counts, and acid levels. Other tests may be needed if there is concern about bleeding or damage to another organ. In an intentional or uncertain overdose, testing may also look for common co-ingestants such as paracetamol, also called acetaminophen, or salicylates such as aspirin.

Treatment should not be delayed while waiting for every detail or test result.

Treatment and management

Ketoprofen overdose is treated with supportive care. This means maintaining normal body functions and treating problems as they appear. There is no antidote that directly reverses

ketoprofen.

A person without symptoms may still be observed for a period based on the amount and formulation taken. During observation, clinicians may monitor alertness, breathing, circulation, urine output, and blood test results.

Fluids may be given through a vein when there is dehydration, low blood pressure, or concern about kidney blood flow. Medicines may be used to control vomiting, protect the stomach, treat seizures, or manage other complications. Oxygen or breathing support may be needed in severe poisoning.

Activated charcoal can bind some medicine in the digestive tract. It may be considered after a substantial, recent ingestion when the person can swallow safely or their airway is protected. It is not suitable for every overdose and should only be given under poison-service or medical direction. Vomiting should not be induced.

Ketoprofen is strongly attached to proteins in the blood, so dialysis does not remove much of the drug itself. Dialysis may still be used if severe kidney failure, dangerous salt disturbances, or persistent metabolic acidosis develops.

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

Complications

Most people with mild poisoning recover without lasting problems. Complications are more likely after a large overdose, delayed treatment, significant dehydration, or exposure to additional drugs.

Possible complications include:

Kidney injury is often temporary, but recovery may take days or longer. Rarely, severe damage can lead to lasting loss of kidney function. Major digestive bleeding or prolonged low blood pressure may also require extended hospital treatment.

- Stomach or intestinal inflammation, ulcers, or bleeding
- Acute kidney injury
- Severe vomiting and dehydration
- Seizures, coma, or breathing failure
- Low blood pressure and reduced blood flow to organs
- Metabolic acidosis

- Liver injury, although this is less typical
- Aspiration pneumonia if vomit enters the lungs

Prevention

Ketoprofen overdose is often preventable, although mistakes can still happen.

Keep ketoprofen in its original, clearly labelled container. Store it out of sight and reach of children and anyone who may take it by mistake. Child-resistant packaging helps but is not completely childproof.

Follow the product label or the instructions given with the medicine. Use a written schedule or medication organiser if repeated doses are easy to forget. Avoid transferring tablets into unlabelled containers.

Check the active ingredients in nonprescription pain and cold products. Do not combine ketoprofen with another NSAID unless a clinician has specifically advised it. Ibuprofen, naproxen, diclofenac, and aspirin are also NSAIDs, although low-dose aspirin prescribed for heart or stroke prevention should not be stopped without medical advice.

Return unwanted or expired medicine through a pharmacy or local medicine take-back programme when one is available.

If you are worried that you might use medicine to harm yourself, move away from the medicine and contact emergency services, a crisis service, or a trusted person who can stay with you.

Living with it and what to expect

Ketoprofen overdose is a single poisoning event rather than an illness that usually continues for years. What happens afterward is shaped by the amount taken, other substances involved, symptoms, and whether any organs were injured.

People with mild symptoms may improve as the drug leaves the body and may go home after appropriate observation. Temporary tiredness or stomach discomfort can continue for a short time.

If blood tests show kidney injury, follow-up may continue for days or weeks. Repeat tests can show whether kidney function has returned toward its previous level. Digestive bleeding, severe acidosis, or breathing problems may require a longer hospital stay.

Most people who recover without organ damage do not develop ongoing effects from the overdose. Severe poisoning can occasionally leave lasting kidney or neurological problems.

Your follow-up plan should reflect the complications that actually occurred rather than the overdose alone.

After an accidental overdose, reviewing storage, labels, and medication routines can lower the chance of another event. After an intentional overdose, emotional recovery and ongoing mental health support are important parts of care.

When to get medical help

Get immediate poison advice after any suspected ketoprofen overdose, even if there are no symptoms. Contact your local poison information service, emergency department, or emergency medical service. Have the packet or container available if possible, but do not delay the call while looking for it.

Call emergency services now if the person:

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

Routine follow-up is different from emergency care. After discharge, attend planned blood tests or reviews, especially if kidney function, bleeding, or mental health was a concern. Seek earlier advice if vomiting continues, urine output falls, stomach pain worsens, or new bleeding develops.

- Is difficult to wake, unconscious, or having a seizure
- Has slow, irregular, or difficult breathing
- Collapses or appears severely confused
- Vomits blood or passes black, sticky bowel movements
- Has severe or worsening stomach pain
- Produces very little urine
- Took ketoprofen intentionally or may have taken other substances

Common questions

How much ketoprofen causes an overdose?

There is no single amount that is safe for everyone or certain to cause severe poisoning. Risk is affected by the product strength, formulation, body size, kidney function, dehydration, and other substances taken. A poison information service can assess the specific exposure.

Can I wait to see whether symptoms develop?

No. Symptoms may be delayed, and early advice helps determine whether home observation or medical assessment is appropriate. Contact a poison service or emergency medical service as soon as the overdose is discovered.

Is there an antidote for ketoprofen overdose?

No specific antidote exists. Treatment supports the body while it clears the medicine and addresses problems such as dehydration, stomach irritation, seizures, kidney injury, or breathing difficulty.

Should I make someone vomit after taking too much ketoprofen?

No. Inducing vomiting can cause choking or allow vomit to enter the lungs. Follow instructions from a poison specialist or emergency clinician instead.

Can ketoprofen overdose damage the kidneys permanently?

It can cause acute kidney injury, particularly after a large exposure or when the person is dehydrated or already has kidney disease. Many cases improve with treatment, but severe injury can occasionally leave lasting damage.

Can I take ketoprofen again after recovering?

That decision should be made during routine follow-up. It will depend on why the overdose happened and whether there was kidney injury, digestive bleeding, or another complication. A different pain-management option may be considered.

Sources

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