CONDITION

Indomethacin overdose

Indomethacin overdose is poisoning caused by taking more indomethacin than the body can safely handle.

WHAT IT IS
Toxic effects after taking too much indomethacin

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

MAIN SYMPTOMS
Nausea, vomiting, stomach pain, drowsiness

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

HOW IT IS DIAGNOSED
Exposure history and clinical assessment; no routine confirmatory test

MAIN TREATMENT
Poison-centre guidance, monitoring, and supportive hospital care

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

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

LONG-TERM OUTLOOK
Most recover; severe kidney or brain injury can persist

Overview

Indomethacin is a nonsteroidal anti-inflammatory drug like ibuprofen or naproxen , or NSAID. It is used to reduce pain and inflammation in conditions such as arthritis and gout. An overdose happens when someone takes more indomethacin than their body can safely process.

Indomethacin reduces substances called prostaglandins. These substances contribute to pain and swelling, but they also help protect the stomach lining, maintain blood flow through the kidneys, and support normal blood vessel function. Too much indomethacin can interfere with these protective effects.

Many overdoses cause temporary digestive or nervous system symptoms. Larger exposures can cause stomach bleeding, kidney injury, seizures, or severe drowsiness. Other medicines or alcohol taken at the same time can change the risk.

A suspected overdose needs prompt advice even when the person feels well. Symptoms may not appear immediately, and the amount swallowed can be difficult to judge. A poison centre can assess the product, amount, timing, symptoms, age, weight, and other health conditions.

Symptoms

Symptoms often involve the stomach, brain, and kidneys. Possible early symptoms include:

More serious poisoning may cause vomiting of blood, black stools, reduced urine production, severe confusion, or difficulty staying awake. Seizures and loss of consciousness can occur in severe cases.

Kidney injury may not cause obvious symptoms at first. Later signs can include passing much less urine, swelling, tiredness, or shortness of breath. Blood tests are needed to identify some kidney and body-chemistry changes.

Symptoms can be affected by the formulation taken. Extended-release medicine is designed to release indomethacin over a longer period, so observation may need to continue even if there are no immediate symptoms.

These symptoms are not specific to indomethacin overdose. Similar symptoms can come from illness, another medicine, or a combination of substances. Do not use symptoms alone to decide whether an exposure is safe.

- Nausea, vomiting, or stomach pain
- Headache, dizziness, or ringing in the ears
- Unusual sleepiness, weakness, or confusion
- Tingling or numbness

Causes and risk factors

An overdose may happen because of a dosing mistake, confusion between different strengths, or taking an additional dose after forgetting an earlier one. Children may swallow medicine that was not stored securely. Some overdoses are intentional.

Using more than one product containing indomethacin can also lead to an excessive total amount. Indomethacin is available in different forms, including capsules and suppositories. A medicine list can help prevent the same drug being used in more than one form without realising it.

Some factors can increase the chance of serious effects after an overdose:

Serious side effects can sometimes occur while taking a prescribed amount. That is not necessarily an overdose, but symptoms such as stomach bleeding, very little urine, chest pain, or a severe allergic reaction still need medical attention.

- Kidney disease, dehydration, or reduced blood flow to the kidneys
- A history of stomach ulcers or digestive tract bleeding
- Older age or very young age
- Taking blood thinners like warfarin or apixaban , other NSAIDs, or medicines that affect kidney function
- Taking alcohol, sedatives, or other drugs during the same event
- A large exposure or delayed access to medical assessment

Diagnosis

There is no routine blood test that confirms an indomethacin overdose or reliably predicts how severe it will become. Diagnosis is usually based on what was taken, the estimated amount, when it happened, and the person's symptoms and examination.

If possible, take the medicine container or packaging to the hospital. Useful details include the strength, formulation, number of missing capsules or suppositories, and whether other substances may have been involved. Do not delay getting help while trying to collect perfect information.

Medical assessment may include checking breathing, heart rate, blood pressure, temperature, alertness, and urine output. An electrocardiogram, or ECG, may be used to check the heart's electrical activity, especially when other medicines could have been taken.

Blood and urine tests may check:

Tests may be repeated if symptoms develop or kidney function changes. Imaging is not usually needed unless there is concern about another condition or complication.

- Kidney function and electrolyte levels
- The body's acid-base balance
- Blood cell counts when bleeding is suspected
- Other common poisons or medicines when the exposure is uncertain

Treatment and management

There is no specific antidote that reverses indomethacin poisoning. Treatment supports breathing, circulation, kidney function, and other body systems while the medicine is cleared.

The first step is to contact a poison centre or emergency service. Do not make the person vomit. Do not give food, drink, antacids, or home remedies unless a poison specialist or healthcare professional advises it.

Activated charcoal can bind some medicine inside the digestive tract. It is not used routinely for every overdose. A hospital or poison specialist may consider it soon after a potentially serious exposure when the person can swallow safely or their airway is protected. Activated charcoal should not be given at home without professional direction because it can enter the lungs if the person vomits or becomes drowsy.

Hospital care may include:

Indomethacin binds strongly to proteins in the blood. For this reason, haemodialysis-a process that filters the blood-is not expected to remove much of the medicine. Dialysis may still be needed if severe kidney failure or another complication requires it.

If the overdose was intentional, treatment also includes a compassionate mental health assessment and a plan for ongoing safety and support. This should happen alongside medical care, not instead of it.

- Observation and repeated checks of alertness and vital signs
- Fluids given into a vein when appropriate
- Medicines to control vomiting, seizures, or other symptoms
- Monitoring of kidney function, urine output, and blood chemistry
- Treatment for stomach or intestinal bleeding if it occurs
- Breathing support in severe poisoning

Complications

Most people with mild poisoning recover with observation and supportive care. Possible complications include inflammation or bleeding in the stomach and intestines, acute kidney injury, and disturbances in the body's salt or acid balance.

Severe drowsiness can affect breathing or allow vomit to enter the lungs. Rare severe effects include seizures, coma, unstable blood pressure, and lasting injury caused by a lack of oxygen.

Kidney problems are often reversible, but recovery can take longer after severe injury. Digestive bleeding may require further treatment and follow-up. Death is possible in severe poisoning, especially when a large amount or several substances were taken, but it is not the usual outcome.

Prevention

Indomethacin overdose is often preventable. Keep it in its original, labelled container and store it where children and other household members cannot reach it. Avoid transferring capsules into unlabelled containers.

Take only the formulation and amount shown on the prescription label. A pill organiser, written schedule, or medication reminder can reduce uncertainty about whether a dose was already taken. If you are unsure, check with a pharmacist rather than taking another dose.

Before using an over-the-counter pain medicine, check whether it is another NSAID, such as ibuprofen or naproxen. Combining NSAIDs may increase the risk of bleeding and kidney injury even when it does not amount to an indomethacin overdose.

Return unwanted medicine through a pharmacy or community take-back programme when one is available. Do not keep large supplies that are no longer needed.

If thoughts of self-harm are making medicines feel unsafe to have nearby, seek immediate support. A trusted person or healthcare service may be able to help arrange safer storage while you receive care.

Living with it and what to expect

An indomethacin overdose is usually a single, short-term event rather than a condition that continues for years. People with minor symptoms may improve over several hours, while those with kidney injury, bleeding, or nervous system effects may need longer monitoring and recovery.

Follow-up is based on what happened during the overdose. Repeat blood tests may be needed after kidney injury or abnormal electrolyte results. Ongoing stomach pain, dark stools, reduced urine, swelling, or unusual tiredness should be reported promptly.

An overdose does not automatically mean indomethacin can never be used again. However, do not restart it until the clinician managing the underlying pain or inflammation has reviewed what happened. A different medicine may be considered if indomethacin caused complications or is difficult to use safely.

Most people return to their usual activities without lasting effects. Recovery can take longer after a severe overdose, and rare kidney or brain injury may cause ongoing health needs. An intentional overdose may also require continuing mental health care, practical support, and a safety plan.

When to get medical help

Contact a poison centre immediately if too much indomethacin may have been taken, even if there are no symptoms. In the United States, Poison Control can be reached at 1-800-222-1222 . Elsewhere, contact your local poison information centre or urgent medical service.

Call emergency services now if the person:

While waiting for help, keep the packaging nearby. If the person is unconscious but breathing, place them on their side if you can do so safely. Do not give anything by mouth.

Routine follow-up is different from emergency care. After discharge, attend any recommended appointments or blood tests. Contact the follow-up service promptly for persistent stomach pain, reduced urine, swelling, vomiting, or unusual weakness.

- Is difficult to wake, collapses, or has a seizure
- Has trouble breathing
- Vomits blood or passes black, tar-like stool
- Has severe confusion or rapidly worsening symptoms
- Has taken indomethacin as an act of self-harm
- May also have taken other medicines, drugs, or an unknown substance

Common questions

Do I need emergency care if I took one extra indomethacin dose?

An extra dose does not affect everyone in the same way. Risk depends on the strength, formulation, timing, age, body size, health conditions, and other medicines taken. Contact a pharmacist or poison centre promptly for an individual risk assessment. Do not take another dose while waiting for advice.

How long does an indomethacin overdose take to cause symptoms?

Digestive or nervous system symptoms may begin within hours, but timing is not predictable.

Extended-release products may cause later or longer-lasting effects. Feeling well soon after the exposure does not prove that it is safe to remain at home without advice.

Is there an antidote for indomethacin overdose?

No specific antidote is available. Treatment focuses on monitoring and supporting the body until the drug is cleared. Symptoms such as vomiting, seizures, dehydration, bleeding, or kidney problems are treated directly.

Can an indomethacin overdose damage my kidneys?

Yes. Indomethacin can reduce blood flow through the kidneys, particularly after a large exposure or when dehydration or kidney disease is present. Kidney injury may have few early symptoms, so blood tests and urine monitoring can be important.

Should I make myself vomit after taking too much?

No. Making yourself vomit can cause choking or allow vomit to enter the lungs. Call a poison centre or emergency service and follow its instructions instead.

Can I take indomethacin again after an overdose?

Do not restart it on your own. The clinician responsible for your ongoing care can review whether indomethacin remains appropriate, whether follow-up tests are needed, and whether another treatment would be safer.

Sources

- DailyMed: Indomethacin capsule prescribing information
- MedlinePlus Medical Encyclopedia: Indomethacin overdose
- Royal Children's Hospital Melbourne: Clinical practice guideline-Nonsteroidal anti-inflammatory drug poisoning
- American Academy of Clinical Toxicology and European Association of Poisons Centres and Clinical Toxicologists: Position paper-Single-dose activated charcoal, Clinical Toxicology , 2005
- American Association of Poison Control Centers: NSAID poisoning-Evidence-based consensus guideline for out-of-hospital management, Clinical Toxicology , 2007
- National Capital Poison Center: Get help online or by phone