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Cardiac glycoside overdose

Cardiac glycosides are medicines for treating heart failure and certain irregular heartbeats. They are one of several classes of drugs used to treat the heart and related conditions. These medicines are a common cause of poisoning.

Cardiac glycoside overdose occurs when someone takes more than the normal or recommended amount of this medicine. This can be by accident or on purpose.

Cardiac glycosides are found in several plants, including the leaves of the foxglove plant. This plant is the original source of the medicine digitalis. People who eat a large amount of these leaves may develop symptoms of an overdose.

Long-term (chronic) poisoning can occur in people who take cardiac glycosides every day. This can happen if someone develops kidney problems or becomes dehydrated (especially in the hot summer months). This problem usually occurs in older people.

This article is for information only. DO NOT use it to treat or manage an actual overdose. If you or someone you are with overdoses, call your local emergency number (such as 911), or your local poison control center can be reached directly by calling the national toll-free Poison Help hotline (1-800-222-1222) from anywhere in the United States.

Poisonous Ingredient

Cardiac glycoside is a chemical that has effects on the heart, stomach, intestines, and nervous system. It is the active ingredient in many different heart medicines. It can be poisonous if taken in large amounts.

Where Found

The medicine digoxin contains cardiac glycosides.

Besides the foxglove plant, cardiac glycosides also occur naturally in plants such as Lily-of-the-Valley and oleander, among several others.

Symptoms

Symptoms may be vague, especially in the older people.

They may occur in different parts of the body. The ones with an asterisk (*) next to them usually occur only in chronic overdoses.

EYES, EARS, NOSE, AND THROAT

- Blurred vision
- Halos around objects (yellow, green, white)*

SKIN

- Allergic reaction, including possible Stevens-Johnson syndrome (serious rash and difficulty swallowing and breathing)
- Hives
- Rash

STOMACH AND INTESTINES

- Diarrhea
- Loss of appetite*
- Nausea and vomiting
- Stomach pain

HEART AND BLOOD

- Irregular heartbeat (or slow heartbeat)
- Shock (extremely low blood pressure)
- Weakness

NERVOUS SYSTEM

- Confusion
- Depression*
- Drowsiness
- Fainting
- Hallucinations*
- Headache
- Lethargy or weakness

MENTAL HEALTH

- Apathy (not caring about anything)

Home Care

Seek medical help right away. Do NOT make the person throw up unless poison control or a health care provider tells you to do so.

Before Calling Emergency

Have this information ready:

- Person's age, weight, and condition
- Name of the product (and strength, if known)
- Time it was swallowed
- Amount swallowed

Poison Control

Your local poison control center can be reached directly by calling the national toll-free Poison Help hotline (1800-222-1222) from anywhere in the United States. This national hotline will let you talk to experts in poisoning. They will give you further instructions.

This is a free and confidential service. All local poison control centers in the United States use this national number. You should call if you have any questions about poisoning or poison control. It does NOT need to be an emergency. You can call for any reason, 24 hours a day, 7 days a week.

What to Expect at the Emergency Room

Take the container with you to the hospital, if possible.

The provider will measure and monitor person's vital signs, including temperature, pulse, breathing rate, and blood pressure.

Tests that may be done include:

- Blood and urine tests
- Chest x-ray
- ECG (electrocardiogram, or heart tracing)

Treatment may include:

- Activated charcoal
- Breathing support, which may include oxygen or a ventilator (tube through the mouth into the lungs and breathing machine)
- Intravenous fluids (IV, given through a vein)
- Laxatives
- Medicine to treat symptoms and reverse the effect of the drug
- Pacemaker for the heart for serious heart rhythm disturbances
- Renal dialysis (kidney machine) in severe cases

Outlook (Prognosis)

Reduced heart function and heart rhythm disturbances can cause poor outcomes. Death can occur, especially in young children and older adults. Older people are especially likely to suffer from problems of long-term (chronic) cardiac glycoside poisoning.

Alternative Names

Digoxin overdose; Digitoxin overdose; Lanoxin overdose; Purgoxin overdose; Allocar overdose; Corramedan overdose; Crystodigin overdose

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Updated by: Jesse Borke, MD, CPE, FAAEM, FACEP, Attending Physician at Kaiser Permanente, Orange County, CA. Also reviewed by David C. Dugdale, MD, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team.

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