

## Poison HOTLINE

1-800-222-1222

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## Did you know .....

The smallest dose of colchicine associated with a fatality in an adult is 7 mg. Colchicine is available as a 0.6 mg tablet and 0.6 mg/5 mL liquid. Thus, a potentially fatal dose of colchicine in an adult is 12 tablets or 60 mL (2 ounces) of the liquid.

Certain factors are associated with a poor outcome in colchicine ingestions. These include ingestion of a large dose of colchicine (>10 mg or >0.5 mg/kg), a WBC >18,000 calls/uL, elevated INR and cardiogenic shock within 72 hours of the ingestion.

Two plants, the autumn crocus and the glory lily, contain colchicine. All parts are considered toxic, particularly the stem and roots.



## Colchicine

Colchicine is used in adults to prevent or treat attacks of gout, the sudden, severe pain in one or more joints caused by abnormally high levels of uric acid. It is also used in adults and children 4 years old or older to treat Familial Mediterranean Fever, an inborn condition that causes episodes of fever, pain and swelling of abdomen, chest and joints. It comes as a tablet or oral solution. Colchicine is not a pain medication and should not be used to relieve other causes of pain. Colchicine should only be taken as directed because it has a very narrow therapeutic index and overdosing is extremely serious.

Colchicine binds with the tubulin and disrupts microtubule formations inhibiting cell division. It's mechanism of action is similar to some chemotherapeutic agents. Overdoses are extremely serious with severe multi-organ toxicity. Patients with renal failure are more susceptible to toxicity and death. Colchicine poisoning affects all organ systems with toxic effects occurring from hours to several days after exposure.

Symptoms of mild to moderate toxicity include nausea, vomiting, diarrhea, and abdominal pain.

In a severe overdose, colchicine's clinical effects are classically divided into three phases. The onset of symptoms may be delayed for 6-12 hours.

<u>Phase One. First 24 hours; GI.</u> Symptoms include nausea, vomiting, diarrhea, abdominal pain, hypovolemia, and hypotension. WBC may be elevated.

<u>Phase Two. Days 1-7; Systemic Toxicity</u>. Symptoms can include acute lung injury; failure of the liver, kidneys, and bone marrow; rhabdomyolysis; arrhythmias; confusion, seizures, and death.

<u>Phase Three. Days 8 and onward; Recovery or Death.</u> Ongoing multisystem organ failure may lead to death of the patient. Patients who recover from severe colchicine poisoning my have persistent alopecia, myopathies, and neuropathies.

Treatment is primarily good supportive care. Hemodialysis does not remove colchicine but may be useful to treat acute renal failure, acid-base disorders, and electrolyte abnormalities.

For specific recommendations call the IPCC at 1-800-222-1222.

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