



American College of Medical Toxicology

Physicians Specializing in the Care of Poisoned Patients

Diphenhydramine

What is diphenhydramine?

- Diphenhydramine is an over-the-counter medication which is a “histamine blocker.” This means it blocks histamine’s ability to cause its usual effects of inflammation, runny nose, watery eyes, and dilating some blood vessels throughout the body. By blocking these effects in a person with an allergic reaction related to increased histamine, itching and swelling can be reduced.

What are reasons diphenhydramine is prescribed?

- Diphenhydramine is used for allergic reactions and environment allergies but it can also be given as a sleep aid, to treat motion sickness, and is also found in some cold medications.

In what forms can diphenhydramine be used?

- Diphenhydramine is typically taken by mouth as a pill or as a liquid. It can also be given as an injection by health care professionals. It can be used starting at the age of two.

Can diphenhydramine be abused?

- In the oral form, diphenhydramine usually does not have an addictive quality or an abuse potential. There have been rare reports of an addictive potential when taken at high doses for prolonged period of time. The intravenous form has sometimes been abused by people who feel it gives them a sensation of being ‘high’ when given with pain medications.

What are the side effects of diphenhydramine?

- Diphenhydramine can cause dry mouth, difficulty with urination, drowsiness, blurry vision, skin flushing, irritability and confusion and/or hallucinations.

If I stop taking diphenhydramine, are there side effects?

- There are not any adverse symptoms for people who quit taking diphenhydramine if diphenhydramine has been taken at the usual recommended dose. If diphenhydramine was taken for a prolonged period of time at a larger than usual dose, there may be some symptoms of withdrawal including insomnia and irritability.

Is diphenhydramine dangerous?

- Potentially. If taken in large quantities, diphenhydramine can cause severe agitation and confusion, fever, skin flushing, problems with vision, dry mouth, dry eyes, and inability to sweat. Overdoses can lead to high heart rates, abnormal heart rhythms, seizures, and death.
- If given to elderly patients, diphenhydramine can cause confusion and agitation. Because of this, diphenhydramine is not recommended in elderly patients for insomnia or treatment for the common cold; though it should still be given in cases of allergic reaction.

What is the treatment for diphenhydramine poisoning?

- The specific treatment provided to patients with diphenhydramine poisoning may vary depending on the symptoms experienced. Care may include providing hydration with fluids through an intravenous line inserted into a vein, giving calming medications to decrease confusion and agitation or to treat seizures, or placing the patient on a breathing machine with deep sedation until the medication effects wear off. Some patients may be treated with an antidote called physostigmine, which may reverse some of the effects of diphenhydramine in the brain.

Does diphenhydramine interact with other medications?

- If taken with other sleep-aids or pain medications, extreme drowsiness may occur; this is due to the fact that many of these medications have similar uses and side effects.

Created by Dan McCabe, MD and Sean Bryant, MD. These answers are provided by volunteer medical toxicologists for the purpose of public education, and do not necessarily represent the policies or positions of the American College of Medical Toxicology.

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