BENADRYL DOES NOT FIX SNAKEBITES

Note: This post was written by our very own Dr. Nick Brandehoff, emergency physician and medical toxicologist. Please heed his advice and spread the word that Benadryl is not an appropriate treatment for snakebites in humans or pets!

I wanted to address the poor information about the use of Benadryl (diphenhydramine) making the rounds on several snakebite and outdoor forums. Benadryl is ineffective for treating a venomous snakebite, even as a temporizing measure in the back country, for the following reasons:

1) Pit viper envenomations in the US cause local tissue injury from direct venom effect. The cell death causes swelling and pain from the release of intracellular contents as the cell dies. Furthermore, venom causes blood vessels to become "leaky" resulting in further swelling, redness, and pain as fluid leaves our blood vessels and enter the tissues. Benadryl does nothing to negate these effects.

2) Systemic symptoms of envenomation are rare but may include nausea, vomiting, low blood pressure, swelling of the throat, bleeding, etc. These are also venom induced and are not reversed with Benadryl.

3) Allergic reactions can happen from a snakebite but are very rare and if there are systemic signs as discussed above, the acute treatment is epinephrine, not Benadryl (or steroids, etc). Benadryl and other drugs can be used in conjunction with epinephrine at the hospital to keep the allergic reaction from rebounding.

4) Comparing bee venom and snake venom to assume Benadryl will work is not congruent. Bee venom specially targets cells causing release of histamine which results in swelling, pain, redness, and allergic reactions. This is similar to the pathway for non-venom induced allergic reactions. Benadryl is a "antihistamine", so the mechanism to stop the reaction makes Benadryl a good drug for this scenario. This is not the case for snake venoms, which work via different mechanisms.

In short, Benadryl is not effective for snake envenomations in humans or other animals. Please stop sharing this information. Antivenom along with proper supportive care are the only effective treatments supported by peer-reviewed literature.

- Nick Brandehoff, MD