

The Buzz on Anaphylaxis

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Bev Stevenson is a veritable human encyclopedia of somewhat useless, mostly amusing but occasionally helpful stories and dubious facts. She works as an Emergency Nurse in Calgary, a Stand Up Comic, and is a Strathcona Resident.

I received my gardening catalogues in the mail this week, but found it difficult to get excited about flowers in this snowy -20 C weather. Whenever I do think of summer and gardening, I have to think also about wasps. Why? Because one almost killed me 10 years ago! *Whaaaaat!?* (Don't worry – apparently I'm fine)

I am referring to **ANAPHYLAXIS** (Anna Phil Axis), a serious medical condition that anyone could develop. Everyone, not just medical personnel, should know the signs and symptoms and what to do.

ANAPHYLAXIS is defined as 'A systemic allergic reaction of such severity as to be potentially fatal'. These acute reactions occur because of different stimuli such as penicillin (75% of cases), foods (shellfish, nuts, milk, eggs), and 20% are due to hymenopteran stings. More about anaphylaxis in a minute...



What's That?

Hyma-*WHAT!?* Hymenopteran are very familiar to us as the wasps and bees in our gardens and flowers, drowning in sweet drinks or beer, and attacking burgers left out on the picnic table. Did you know that there are 100,000 kinds of wasps??? And did you also know that wasps can be yellow/black or white/black without any yellow; some have white faces and some have black faces, and their bodies can be fuzzy or smooth.

I happen to be severely allergic to the white faced ones, so I actually check their little mugs to see which kind they are. (Yes, I know that's weird but I do it anyway.) Another fact: Wasp stingers are lance-shaped so they can sting you repeatedly, unlike bees who lose their stinger during one use. If angered or threatened, the wasps send out an alarm pheromone that attracts their wasp

buddies into a frenzied attack! WATCH OUT! Wasps use their sting as a defense to threat, and so maybe you'll leave them alone.

The normal (not allergic) and therefore expected reactions to a wasp sting include redness and swelling at the sting site, hives, swelling, nausea, vomiting, abdominal cramps and headaches. Scratching at the wound can sometimes cause a significant infection to the tissues called cellulitis that often requires medical intervention.

Where the big problem arises is when the person stung is allergic to the wasp venom (like me!). That means that they have been exposed to the allergen (i.e. have been stung before) and have developed antibodies. When they get stung again, it causes the release of histamine and other chemicals that in turn cause the symptoms of anaphylaxis.

It is estimated that between 1 and 2 million people in the U.S. are severely allergic to stinging insect venom (sorry no data available for Canada). Each year 90 – 100 deaths from sting reactions are reported in the US, but many more deaths may be occurring, mistakenly diagnosed as heart attacks, sunstrokes or attributed to other causes. More people die each year from the effects of insect venom than from spider or snakebites. CRICKEY!! For 1 in 1000 persons, the sting of an insect can be fatal. In my case, less than 1/2 of 1 percent of the population is as severely allergic as I am (not a fact I'm particularly pleased about).



Signs and Symptoms

Signs and symptoms of an anaphylactic reaction generally occur within one hour of exposure and include some or all of the following:

- Swelling of lips & tongue or around the eyes
- Rash, flushing of face, head and palms
- Dizziness, confusion, anxiety, fainting, loss of consciousness
- Chest pain or tightness, shortness of breath, cough, wheezing
- Abdominal pain and cramping, nausea &/or vomiting, diarrhea, dry mouth



What should you do?

If any of these symptoms are noted, you could have a Medical Emergency on your hands. What should you do?

- CALL FOR HELP! Call 911 and get an ambulance on the way. If you are in an isolated area, high-tail it with the patient to the nearest medical facility.
- Try to calm the patient – becoming completely unglued is NOT going to help anything, and you don't want to increase anxiety of the patient.
- If the person is dizzy, faint or unconscious, place him on his back and elevate his legs (helps move the blood to his brain and vital organs)
- If Epinephrine is available (as in an Epi Pen or Ana Kit) USE IT! Follow the instructions and try to remain calm yourself. If the patient carries antihistamine medication, give the directed dose EXCEPT if the patient is incapacitated (ie faint, swollen, coughing) to safely swallow it.

Even if the symptoms seem to resolve on their own, know that anaphylactic effects of the sting can reoccur without warning and be just as severe within the first 12 hours of being stung. Any improvement could be only temporary, so you still need to transport that patient to a medical facility.

If you know of anyone who has a severe allergy to anything, PAY ATTENTION. Know what they are allergic to (asthmatics are particularly allergy prone) and where they keep their Epi Pen. Ensure they carry with them at all times. (I pretty much only carry mine in the summer ☺!) Familiarize yourself with the instructions on how administer than try to 'wing it' (sorry!) under the pressure of emergency. Try to avoid potentially dangerous situations (like, say, a honey farm!) and try to plan ahead in case of emergency.



BEE ready and BEE safe!

Happy Gardening!

