



HCBC Monthly Meetings Summary

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May 3, 2016

Bill Skelton discussed the meeting next month will be in the lodge across the street where our new extractor is. He reminded everyone that bees will not cross the queen excluder to foundation. They need drawn cone in a honey super. Many had swarms this spring.

- "Beekeeping Basics" is on sale for \$12 with only 6-8 left.

William (Bill) A McCann, MD is the speaker tonight. He is with Allergy Partners of WNC. His topic this evening is "Stinging Insect Allergy".

Two years ago, a doctor who was an allergist in Cairo went back to Egypt and studied the hieroglyphics and collected honey. He found that the first pharaoh of Egypt, Menes who developed papyrus and writing, died from a wasp sting circa 2600 BC. Egyptians used propolis to seal mummy wrappings and to treat cuts. And treated RA with bee venom.

I added this excerpt from Smithsonian.

- Modern archeologists, excavating ancient Egyptian tombs, have often found something unexpected amongst the tombs' artifacts: pots of honey, thousands of years old, and yet still preserved. Through millennia, the archeologists discover, the food remains unspoiled, an unmistakable testament to the eternal shelf-life of honey."
- Read more: <http://www.smithsonianmag.com/science-nature/the-science-behind-honeys-eternal-shelf-life-1218690/#iMyf7pm6GYMjQy1K.99>

Dr. McCann states the definition of an allergy:

Allergy - when the immune system is reacting to things it should ignore. It makes IgE antibodies.

(Wikipedia: Immunoglobulin E (IgE) is a kind of antibody (or immunoglobulin (Ig) "isotype") that has only been found in mammals. IgE is synthesized by plasma cells. IgE also has an essential role in **type I hypersensitivity**, which manifests various allergic diseases, such as allergic **asthma**, most types of **sinusitis**, **allergic rhinitis**, food allergies, and specific types of urticaria and **atopic dermatitis**. IgE also plays a pivotal role in responses to allergens, such as: **anaphylactic** drugs, bee stings, and antigen preparations used in desensitization **immunotherapy**.)

The Mast cell is part of the immune system where the body contacts the environment through the eyes and skin. **Type I** Hypersensitivity Reaction occurs when the Mast cell pops and releases chemicals like:

- Histamine - that causes itching

- Lipid mediators - cause symptoms
- Cytokines - that cause inflammation
- Enzymes - that cause tissue damage

Indoor allergens: cats, dogs, mites, bugs, and mold (aspergillons)

Outdoor allergens: Trees, grasses, weeds, molds

Foods: Milk, eggs, soy, nuts, shellfish, wheat, rice, etc.

Stinging Bee Allergy:

- 0.3 - 3% and up to 8% will have an allergic reaction
- 40 - 60% die each year in the US, maybe higher
- 50% who die did not know they had an allergy
- Allergies to bees is not related to other allergies and does not run in families
- Allergies occur more in adults, men, and beekeepers

Stinging Insects: aphids - honey bees, bumble bees, vespids - wasps and hornets, fire ants - kills native ants and leaves a pimple when stung.

- **Types of reactions:** Local, large local, toxic, systemic
- **Treatment:** Avoid, remove stinger, use EpiPen, take advice, use anti-venom, take an allergy shot with venom, desensitize.

Local Reaction: redness 1 - 5cm, resolves in several hours to several days, prednisone may help

- Large Local Reaction: shots help, use cold compresses

Toxic Reaction: when stung, a lot will cause diarrhea, nausea, vomiting, fever, convulsions, fainting

Mechanism - venom produces a physiological effect. Serum sickness caused by multiple stings.

IGG antibodies causes clumps in blood vessels. Can get a weird snakelike rash. Can be delayed after stings. Treatment is prednisone or steroids.

Systemic: Causes Anaphylaxis and can be life threatening. Can begin within a minute to 30 minutes. Causes are: proteins from foods, venom, and medication. Find the cause and avoid in the future.

Anaphylaxis Reaction:

Hives/swelling	88%
Upper airway swelling	56%
Respiratory distress	47%
Decrease in Blood Pressure	33%
Gastrointestinal problems	30%

Women can experience uterine cramping - the uterus has a lot of Mast cells

One can have feelings of 'impending doom'

Some have reported having experienced 'out of body experiences' after being stung by a bee

Anaphylactic Triggers: The most fatal are Food, Drugs, and Stings - 47%

Food	35%
Drugs	25% esp. penicillin

Idiopathic	20%
Stings	15%
Exercise	5%
Allergens/Vaccines	3%

High risk people: History of severe anaphylaxis, Systemic reaction while on VIT, Severe honeybee allergy, underlying medical condition - taking Beta blockers, ACE inhibitors, lisinopril, etc. Have frequent unavoidable exposure - beekeepers

Epinephrine: Keep 2 EpiPens together in case there are some delayed reactions! Inject immediately! Delays can be fatal.

Dose by weight: 0.15mg for children 33 lbs. or under, 0.30mg for adults 66 lbs. or over
When in doubt inject. There are few contraindications.

Inject of lateral or side of thigh
Go to the ER

When you have an allergic reaction your blood pressure will decrease; your blood vessels constrict

Epinephrine will get the heart going again and increase the BP - Doctors give epinephrine for heart attacks.

- The shelf-life for an EpiPen is 1 year. It is temperature sensitive to both heat and cold. After a year, it loses potency. Check the liquid. It should be clear, if cloudy dispose of it. The EpiPen is expensive. There is an App called Good Rx that will shop for pharmacies that have your meds and the out-of-pocket price. You can also go to MyEpiPen.com at <https://www.epipen.com/my-epipen>

There are allergy tests performed on the skin of the back. A welt appears if allergic. 11 out of 8,000 have venom allergies to yellow jackets, white-faced and hornets, wasps, and honeybees.

Wear shoes, carry the EpiPen, avoid potentially dangerous areas, stay away from garbage and pop cans, test children, carry Medic Alert jewelry. You can get allergy shots which is a Venom Immuno Therapy where small doses are administered and increased to build up tolerance. It is done in 4 weeks. You must have maintenance for VIT every 3-5 years with injections every 4-8 weeks. Maintenance dose is 100 mg. It is 98% preventive future systemic reactions.

Honey is an Effective Treatment for Environmental Allergies such as Asthma

Honey comes from:

Local unpasteurized honey - BEST

Nationally collected, filtered, pasteurized honey

Corn syrup with synthetic honey flavoring

Ways to calm the sting is to chew Plantain and put on the sting

Moisten Tobacco into a paste and put on the sting

Some say meat tenderizer works also

Meeting adjourned

Next beekeepers meeting is June 7 at the Lodge at the back of the Mountain Test Farm.

Vicki Morrison

Haywood County Beekeepers Secretary