

# ACUTE ALLERGIC REACTIONS

**Acute allergic reactions are most commonly caused by bee or wasp stings, fly or ant bites, vaccines, and some drugs in sensitive individuals.**

In dogs & cats, allergic reactions most commonly manifest by changes in the skin. Dogs commonly develop *urticaria* or hives on the body within minutes of exposure to an allergic substance. Hives are small raised itchy lesions of localized skin swelling. Hives are found mostly on the trunk. And generally resolve without treatment in 2-4 hours. After the hives form, the dog will develop a severely swollen face, especially around the eyes and the muzzle secondly to angioedema, or swelling and leakage of the small blood vessels in the face. The swollen muzzle, eyelids, and lips of the affected dog will often look similar to those of a normal Shar Pei, and can be painful when touched. The swollen face usually appears within a few hours of being stung or receiving a vaccine and can last for several days before completely resolving. The legs can also become very swollen and painful. Cats mostly develop a swollen face, although they can develop hives as well. Occasionally, pets may vomit-especially if they are having a reaction to a vaccine. Pets with severely swollen faces, hives, or vomiting after a vaccine should be seen by a veterinarian who can administer potent antiinflammatory medications to ease the comfort and reduce the swelling and itchiness quickly.

\*\* *Anaphylaxis* is a very severe type of allergic reaction that is a life threatening condition. In anaphylaxis, the blood pressure plummets, the throat can swell to the point of closing, and the animal goes into acute shock. Fortunately animals rarely suffer anaphylactic reactions, although it is always a possibility.

## Symptoms:

- Swollen face, lips, muzzle, & eyelids (facial angioedema)
- Hives (urticaria)
- Red itchy inflamed skin
- Swollen legs (pitting edema)
- Body rash

## Diagnosis

Diagnosis is usually based on the history of exposure to insects and the clinical signs, specifically a swollen face and possibly hives. The legs swell secondary to blood vessels becoming leaky which allows fluid to move from the blood into the tissues. The veterinarian identifies pitting edema by pressing a thumb into the swollen leg- if the thumb print remains indented for a time, the swelling is pitting edema. If lesions remain for some time or do not respond to treatment., a biopsy may be performed to rule out other causes of skin disease.

## Treatment

Veterinarians will use a combination of steroids and antihistamine injections administered either in the muscle or in the vein for the fastest therapeutic effect. Oral

therapy is usually prescribed for the next 1-3 days or until the swelling resolves. Occasionally, the swelling & hives resolve within hours, but if therapy is not continued for a few days, the swelling comes right back as the initial medications wear off.

### **Prevention- *try to avoid exposure***

There is little one can do to decrease the risk of allergic reactions other than try to avoid exposure & pre-medicate to reduce risks.

- Consider fly spray during the warm months if your dog is going into the woods, especially during May fly & Deer fly season.
- For a prior vaccine reaction, most veterinarians will recommend to pre-treat the pet with a prescribed antihistamine before the pet receives any vaccine
- Give only one vaccine per veterinary visit in sensitive pets.
- Always tell new veterinarians of prior drug or vaccine reactions.