Bacterial Hypersensitivity to Staph Infections

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Bacterial hypersensitivity is a rare disease in dogs and occurs when a dog's immune system overreacts to *Staphylococcus* (Staph) bacteria on its skin. When this occurs, the skin reacts dramatically to the presence of *Staph*.

What are the symptoms of bacterial hypersensitivity?

Bacterial hypersensitivity causes the skin to become very red. Pustules and large vesicles filled with fluid develop on the skin. There is severe itching, and many dogs will cause further damage to their skin through scratching and biting.

It appears that bacterial hypersensitivity in the dog is more likely to occur if other conditions such as hypothyroidism, atopy (allergy to inhaled substances like pollen), or flea allergy dermatitis are present.

How is bacterial hypersensitivity diagnosed?

Bacterial hypersensitivity is diagnosed through bacterial culture and examination of a biopsy sample. Microscopically, there are certain unique changes in the blood vessels of the skin in bacterial hypersensitivity. An intradermal allergy test may also be helpful. In this procedure, a small amount of extract made from the *Staph* bacteria is injected in the skin. The area is examined for a reaction 15 minutes, 24 hours, and 48 hours after the injection. This method is not as accurate as the biopsy.

How is bacterial hypersensitivity treated?

It is extremely important to treat the underlying disease such as hypothyroidism or flea allergy dermatitis. A test is run in the laboratory to determine which antibiotics are most likely to kill the *Staph* and the animal is started on one of those antibiotics. Some animals may need to be on antibiotics or immune stimulants long-term to prevent the *Staph* from multiplying on the skin and causing the hypersensitivity.