Cat-Allergy Vaccine Offers Hope

By Holly Ann Suzik

Small animal practitioners, family members, or clients with allergies to cats? Unfortunately, it's sometimes true. What's also unfortunate is the inconvenient and unreliable treatment—however, a new vaccine may be around the corner.

The experimental vaccine, ALLERVAX Cat, was developed by ImmunoLogic Pharmaceutical Corp, Waltham, Mass, and tested by researchers at Johns Hopkins School of Medicine and New England Medical Center in 95 cat-allergic people. Results seem promising—high-dose group patients' allergy symptoms were soothed significantly. Only mild adverse effects, normally consisting of chest tightness runny nose, were experienced by 16 of the 24 patients in that group, and the symptoms usually subsided without treatment. The vaccine was provided in four injections, one week apart.

With conventional treatment, cat-allergic patients must endure several injections, initially provided twice weekly, then every two weeks. This rigorous regimen often interferes with a work schedule, and in many instances, the therapy may require months or years to take effect. Plus, risk, including anaphylactic shock, can e associated with the injections.

All of the burden related to current treatments makes Dr. Loren Will, director of the Association of Animal Allergic Veterinarians, look forward to the new vaccine. He experienced first-hand the life-altering effects of allergies, when his allergies to cats and horses forced him to leave clinical practice. This happened more than 30 years ago, but Dr. Will says that many veterinarians are still making similar decisions, or are significantly modifying their practices because of their allergies. ALLERVAX Cat, however, may help to alter these decisions. Dr. Will says the new vaccine is a breakthrough, but he also insists that allergy management with an allergist needs to accompany vaccine usage.

Called the first "new generation shot" by Dr. Will, ALLERVAX Cat works by inducing a state of tolerance. The vaccine has two tiny, artificially synthesized fragments of the feline domesticus protein. Although exposing the protein to T cells would normally trigger an allergic response, researchers hoped to create a unique situation in which T cells reversed their role, stopping the allergic response instead. This was done by introducing T cells to identifiable portions of the feline domesticus protein, without other allergy stimuli. Thus, the T cells are expected to remain dormant, hindering the allergic reaction.

According to Philip S. Norman, MD, a professor of medicine at Johns Hopkins, the vaccine is not a cure; however, "It is reasonable to hope that veterinarians who are allergic to cats would be able to work with cats for longer periods of time and have less severe symptoms." Dr. Norman said more in-depth tests of ALLERVAX Cat are being addressed by the FDA.

The research results can be found in the December 1996 issue of the "American Journal of Respiratory and Critical Care Medicine."

