EFFECTS OVER TIME OF STEM CELL THERAPY IN FELINE CHRONIC ALLERGIC ASTHMA

PROJECT STUDY:
Effects of neurokinin-1 (NK1) receptor antagonism on acute and chronic airway inflammation and airflow limitation in experimental feline asthma

Carol Reiner, DVM, PhD, DACVIM; University of Missouri-Columbia

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Asthma is a common inflammatory lower airway disease affecting up to 5% of the pet cat population. These investigators have examined a new drug for potential treatment of feline asthma. Allergic asthma is a common disease afflicting pet cats with potentially serious consequences. These researchers specifically examined the role of biologic chemicals called tachykinins which are speculated to play a role in the disease. The focus of their work was a drug, Cerenia, that specifically inhibits the activity of tachykinins. Specifically, they investigated the usefulness of this drug for both acute “attacks” of asthma as well as for more chronic airway damage.

In the first study, cats were administered a single injection of maropitant or placebo after exposure to inhaled allergen. In the second study, cats were administered oral maropitant or placebo every other day for two weeks. Endpoints of study included a clinical score of severity of clinical signs, measurement of lung mechanics and quantitation of airway eosinophils (the hallmark pathologic cell in feline asthma). Maropitant compared with placebo had no significant effect to reduce any of the endpoints in either study. While these studies did not show that maropitant can be advocated as a treatment for feline asthma, this information is important as veterinarians have been empirically using this drug for asthma without scientific evidence of its efficacy. These investigators have shown that the drug is not useful in cases of feline asthma.

Summary prepared by Melissa A. Kennedy, DVM, PhD, DACVIM © 2015