Detecting Dust and Dander Allergens in IgE Sensitized Individuals Using a Capillary Tube Precipitation Test: A New Non-Intrusive Antigen/Antibody Reaction Test

Bakerson, Audrey

The purpose of this research was to determine if a new non-intrusive allergy test can detect dust and dander allergens in IgE sensitized individuals using a capillary tube precipitation test without the associated risks in currently available tests. Eleven samples of saliva were gathered from individuals with known allergies to cats, dogs, both or neither; along with fur from two cats and five dogs. The dander from the fur from each animal was extracted using water and in another trail using acetone. Cat saliva was also used in one of the trials. One milliliter of saliva was put into each test tube along with one milliliter of antigen solution. There were six different trials with a total of 138 tests. Results indicated that this non-intrusive test detected reactions in several of the samples (see Table 1). Further research is needed using a commercially available antigen Can f 1 solving both the concentration and PH issues allowing for more consistent and reliable results. There is no way to truly avoid dog and cat antigens one hundred percent of the time, so hypersensitive people need to be able to quickly, efficiently, and reliably diagnosis exactly what they are sensitive to. This test would make this a reality for millions of people. (Contains five tables and five figures).

Awards Won: