

The Consortium of Food Allergy Research

Mount Sinai is the lead site of a 5 center Consortium working on novel therapies for food allergies (PI Hugh A. Sampson, MD). Food allergy affects up to 8% of children and 5% of adults. The only current treatment is avoidance of the food, with readiness to treat allergic reactions that can be severe and life-threatening. The Consortium is evaluating a number of alternative approaches to desensitize or possibly cure the allergy. An oral immunotherapy for egg allergy, sublingual immunotherapy for peanut allergy and a novel vaccine for peanut allergy were recently studied and the results were published (see below). Briefly, the egg oral immunotherapy trial indicated that a subset of treated children developed a sustained unresponsiveness to egg after therapy was completed. The sublingual (under the tongue) peanut therapy was very safe, but not as effective as taking doses that are swallowed. The peanut vaccine includes peanut proteins that were modified to make them less allergenic, although in the pilot study, some individuals still had allergic side effects. Overall, the studies are promising but the approaches are not yet ready for routine use. Families are cautioned never to try such therapies on their own.

Ongoing studies are evaluating a “peanut patch” skin immunotherapy for peanut allergy and 2 approaches to treatment of egg allergy. The Consortium also includes an observational study that is elucidating the risk factors and natural course of food allergies. All of the studies include laboratory approaches for insights on treatment. The consortium leverages the resources of the CTSA, particularly the Clinical Research Units and bionutrition resources. These resources allow safe conduct of the studies, which include feeding tests and dosing of study products that could induce allergic reactions. The participating sites include Mount Sinai (UL1 TR-000067), National Jewish Health (UL1 TR-000154), Johns Hopkins (UL1 TR-000424), University of North Carolina (UL1 TR-000083) and Arkansas Children’s Hospital (UL1 TR-000039) and the studies are supported by NIH-NIAID U19AI066738 and U01AI066560.

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