

The great disappearing act: Bone marrow receiver cured of allergy

November 8 2013

Not only can bone marrow transplants be life-saving for children with acute lymphocytic leukemia, they may also cure peanut allergies. According to research presented during the American College of Allergy, Asthma and Immunology's (ACAAI) Annual Scientific Meeting, a 10-year-old boy no longer had a peanut allergy after undergoing a bone marrow transplant.

"It has been reported that bone marrow and liver transplants can transfer peanut allergy from donor to recipient," said allergist Yong Luo, MD, Ph.D., ACAAI member and lead study author. "But our research found a rare case in which a transplant seems to have cured the recipient of their allergy."

At 15 months of age, researchers noted the [child](#) had been diagnosed with a peanut allergy after experiencing whole body hives and vomiting following peanut ingestion. At age 10, he underwent a bone marrow transplant for leukemia, from a donor with no known allergies. Soon after, the child seemed to no longer have an allergy to peanuts. Allergists confirmed with an oral food challenge, which should only be done in an allergist's office, where the child ate a small amount of peanut and showed no allergic reaction.

"Food allergy is associated with the body's abnormal production of high specific IgE levels," said Steven Weiss, MD, Ph.D., ACAAI fellow and study author. "This case, in addition to the previous reports, indicates that genetic modification during the early stages of immune cell

development in [bone marrow](#) may play a large role in causing allergy."

Peanut allergy is one of the most common types of food allergies. According to ACAAI, it is the most prevalent food allergen among school-aged children in the United States, affecting about 400,000. Unlike an allergy to milk or soy, peanut allergy tends to last a lifetime.

Children with peanut allergy should always carry prescribed epinephrine. Even if a parent thinks their child may no longer have an allergy, proper testing should be done by a board-certified allergist to confirm if the child is still sensitive to any particular allergens.

"Food allergies are serious and can cause a severe, life-threatening reaction known as anaphylaxis," said Dr. Weiss. "It's important to be under the regular care of an allergist who can perform proper tests and administer treatment."

Provided by American College of Allergy, Asthma, and Immunology

Citation: The great disappearing act: Bone marrow receiver cured of allergy (2013, November 8) retrieved 24 April 2024 from

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