Intranasal omalizumab does not increase serum IgE levels

(HealthDay)—In patients with birch pollen allergy, intranasal
administration of omalizumab does not result in relevant change of allergen-specific and total immunoglobulin E (IgE) levels, according to a pilot study published online Oct. 30 in *Allergy*.

Julia Eckl-Dorna, M.D., Ph.D., from the Medical University of Vienna, and colleagues performed a double-blind, placebo-controlled trial to assess the effect of a challenge involving intranasal administration of major birch pollen allergen Bet v 1, omalizumab, or placebo on the levels of total and allergen-specific IgE in patients with birch pollen allergy. Measurements of total and allergen-specific IgE, immunoglobulin G, and basophil sensitivity were taken before and eight weeks after the challenge. Controls included subjects treated subcutaneously with either omalizumab or placebo.

The researchers found that intranasal challenge with Bet v 1 induced increases of Bet v 1-specific IgE levels by a median of 59.2 percent, which was significantly more than in the other treatment groups. In patients challenged with omalizumab, there were no relevant changes in allergen-specific and total IgE levels. Significant rises in total IgE and the presence of IgE-omalizumab complexes were seen with subcutaneous administration of omalizumab.

"Intranasal administration of allergen induced rises of allergen-specific IgE levels whereas intranasal administration of omalizumab did not enhance systemic total or allergen-specific IgE levels," conclude the authors.

One author disclosed financial ties to the pharmaceutical industry.

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