



Allergy Immunotherapy (allergy shots): The Ultimate Treatment for Allergies
by Nan Laoprasert, M.D.
March 2008

Allergy season is around the corner. One in five Americans (55 million people) has allergies to airborne triggers such as pollen, mold, or animal dander. There is a proven link between allergies and the development of asthma. Approximately 80% of childhood asthmatics and 50% of adult asthmatics are allergic. Studies also show that about 20% of children with hay fever or allergic rhinitis will develop asthma.

Allergic rhinitis has been shown to lead to a substantial impairment in quality of life. In adults, allergic rhinitis symptoms have been found to cause sleep disturbances, fatigue, headaches, impair normal physical activities, decrease productivity in the workplace, and affect emotional/social functioning. In children, it causes learning difficulties, inability to integrate with peers, anxiety, school problems, family dysfunction, and poor self esteem. Failure to adequately treat allergic rhinitis may lead to a variety of comorbid conditions including asthma, sinus infection, ear infection, frequent respiratory infections, and orthodontic malocclusions. These may further impair quality of life.

Things that can be done to control allergies include:

1. Avoiding the allergens (things you are allergic to). This is not always possible but should be done, especially if you are allergic to animal (dogs, cats, etc.) or pollens.
2. Treating the symptoms with medications. Non-sedating antihistamines and inhalation/intranasal corticosteroids have been shown to improve quality of life in individuals with allergies. However, some medications can have adverse side effects such as drowsiness, irritability (from antihistamines and decongestants) and a possible potential for systemic reactions (e.g. osteoporosis, suppressed immune system, cataracts, and glaucoma) from long term use of topical, intranasal, inhaled, intramuscular, and oral corticosteroids.
3. Stopping the allergic reaction with allergy immunotherapy. This form of treatment is the closest thing to a "cure" for allergy symptoms and is approved by the FDA.

Allergy shots work like a vaccine. The shots are given in gradually increasing doses. Your body responds to the injected amounts of allergen(s) by developing an immunity or tolerance to the allergen(s). As a result of these immune changes, allergy shots can lead to decreased, minimal, or no allergy symptoms when you are exposed to the allergen(s) included in the allergy vaccine. It is not possible to overcome your allergies by repeatedly inhaling the allergen(s) into your nose or lungs.

Allergy shots have been proven to be effective in both adults and children for treatment of allergic rhinitis, allergic conjunctivitis, allergic asthma, and stinging insect allergies. They may provide lasting benefits even after they are discontinued. Multiple studies show that children with allergies who are treated with allergy shots are less likely to develop asthma and less likely to develop additional allergies than those who are treated with medication alone. Therefore, patients who wish to avoid or reduce the long-term use of medications and who want to improve their allergy symptoms are good candidates for allergy shots.