



ALLERGY INFORMATION

DEFINITION AND DETERMINATION

Asthma is narrowing of the lungs caused by muscle tightening and clogging of the airways by inflammation. This can be caused by exposure to pollens, animals, cigarette smoke and pollution. Asthma is diagnosed when a patient is determined to have a reversible airway obstruction after using a bronchodilator such as albuterol. Patients are measured against a standard curve for height weight and sex. Also, some adjustment is made for African-American body types, with the normal values multiplied by eighty-five percent. After an initial testing, the patient inhales a bronchodilator and waits twenty minutes. If lung function has improved twelve percent, the patient is considered to have reversible airway disease, or asthma.

However, asthma is also evaluated by how patients report feeling. A well-conditioned athlete can "fool" the pulmonary function test and do better than eighty percent even though they may have severe asthma symptoms and wheezing on physical exam.

Medication is the mainstay of asthma management. Various medications can treat allergic conjunctivitis and allergic rhinitis, including antihistamines, antileukotrienes, nasal steroids and nasal antihistamines for nasal congestion. Oral antihistamines, ocular antihistamines and mast cell stabilizers can treat the ocular and throat symptoms.

The first step is to avoid asthmatic triggers. This includes keeping pets out the bedroom, removing carpet and rugs, using dust mite covers on the beds and installing HEPA filters to keep down the level of pet dander. Patients should avoid going out of doors in the morning between 6 a.m. and 9 a.m., when pollen levels are at their highest. Patients should be tested to determine their sensitivity to pollens, dust mites, dog and cat dander and cockroaches. Immunotherapy or allergy desensitization is indicated for patients to decrease their sensitivity to the allergens that trigger their asthma. Sixty percent of asthmatics are allergic to some antigen, and triggers by immunotherapy can significantly decrease the amount of medication needed for their asthma. If, after treatment and repeated doses of prednisone, the patient continues to have flares of asthma, the patient is a candidate for Xolair, a monoclonal antibody that wipes out IgE.