Overreactions

Charles Harrison Blackley was a mid-1800s English physician who was committed to finding out why he repeatedly suffered from “summer colds.” Earlier theories had suggested the possibility that the trigger for such “colds” could be odors, dust, ozone, benzoic acid, or just the heat itself. Dr Blackley believed that pollens were the stimulant for these symptoms. In order to prove this, he applied serial dilutions of pollen to his own eyes and nose. He showed that just 2 μg of pollen could elicit symptoms of hay fever. He went on to invent allergy skin testing, showing that the application of pollen to his skin could elicit a wheal reaction.

Over the last few decades, there has been a significant rise in numbers of people affected by allergies. It is estimated that allergies currently affect 30% of adults and 40% of children in the United States. It ranks as the sixth most common chronic disease in the United States, resulting in an estimated $18 billion cost to the health care system annually. In addition to allergic rhinitis, other categories of allergy, such as food, drug, insect, and skin, have caused significant morbidity in patients. The reason for the rise in body’s overresponsiveness to allergens remains a mystery. Theories have suggested that increased use of antibiotics may play a role, but more support surrounds the “hygiene hypothesis.” This theory suggests that the improvements in living conditions lead to a lack of exposure to germs, causing our immune system to overreact to potentially harmless irritants. Interestingly, Dr Blackley observed that farmers were less likely to come down with hay fever than those of higher socioeconomic classes.

In this issue of Medical Clinics of North America, Dr Ditto has assembled a team of experts to describe the triggers, presentations, and available treatments for the various...
categories of allergy. In addition, a description of newly recognized symptoms associated with mast cell activation is provided.

Bimal H. Ashar, MD, MBA, FACP  
Division of General Internal Medicine  
Johns Hopkins University School of Medicine  
601 North Caroline Street  
#7143  
Baltimore, MD 21287, USA  

E-mail address:  
Bashar1@jhmi.edu

REFERENCE