

Time Allergy and Asthma Medications for Best Effect

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DENVER — Allergy and asthma sufferers can maximize the benefit of their medications by taking advantage of their bodies' natural circadian rhythms, according to Richard Martin, MD, Chairman of the Department of Medicine at National Jewish Medical and Research Center.

Circadian rhythms are the daily variations in biological functions, from mental alertness to blood pressure and body temperature. Blood pressure generally peaks around 9 p.m. and bottoms out at about 3 a.m., while mental performance and strength both peak at about 3 p.m. Allergies and asthma also follow significant circadian rhythms.

Dr. Martin has studied circadian rhythms and their effect on allergies and asthma for years.

Hay fever symptoms, such as sneezing, runny nose and itchy eyes, generally peak early in the morning, shortly after waking up. Those morning symptoms can be reduced, says Dr. Martin, if people take their allergy medications at night before going to bed.

"Taking your allergy medication at night assures that it will be circulating in your blood stream when you most need it, early the next morning," said Dr. Martin.

Asthma symptoms generally peak at about 4 a.m. One large study indicated nearly three quarters of asthma patients wake up during the night with asthma symptoms at least once a week. For severe asthmatics on oral steroids, taking them at 3 p.m. helps reduce nocturnal symptoms, says Dr. Martin.

Inhaled steroids are a more widely used medication for people with mild to moderate asthma. Studies have shown that inhaled steroids have their greatest effect when taken between at 3 p.m. and 5:30 p.m. However, most inhaled steroids are taken two or more times a day, and research has not yet determined the best times to take the multiple doses.

Dr. Martin says that the most important strategy for inhaled steroids is to be consistent. Taking them in conjunction with regular events, such as breakfast and dinner, is a good way to make sure that you maintain adequate medication in your system.

Allergies can trigger asthma symptoms in many patients. Asthma symptoms generally worsen almost immediately after exposure to the allergen. But some patients also suffer a "late asthmatic response" about six to eight hours later.

The timing of the allergen exposure can affect this delayed response. Studies have shown that about half of asthmatics exposed to allergens in the morning experience the late asthmatic response. But when they are exposed to the allergen in the evening, virtually all asthma patients develop the late asthmatic response.

Dr. Martin recommends that asthmatics who come into contact with an allergen in the evening be especially vigilant about monitoring symptoms and taking asthma medications.

Dr. Martin also recommends that patients monitor their nighttime symptoms. A peak flow meter used before bed and in the morning can detect significant worsening of lung function during the night. Patients who wake up during the night with asthma symptoms or detect significantly reduced peak flow readings in the morning should tell their physician and work to develop a plan to improve control of their disease, says Dr. Martin.

"Most patients should be able to control their asthma enough to sleep well during the night and to engage in a full range of activities during the day," said Dr. Martin.

EDITOR'S NOTE: *A patient should consult his or her personal physician before changing any medical treatments.*

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