Spring is in the air—and so is allergy-triggering pollen

After the record snowfalls that blanketed our area throughout February and into March, the arrival of warmer spring weather is more than a welcome relief. But for seasonal allergy sufferers, any “relief” is short-lived. For them, the advent of spring means but one thing: the return of miserable allergy symptoms that might include sniffling, sneezing, watery eyes, itchy eyes and nose, dark circles beneath the eyes, and coughing or wheezing.

What triggers this constellation of unpleasant symptoms? The answer: airborne pollen. And contrary to popular misconception, the pollen that causes spring allergies is not from all those colorful flowers that are just starting to emerge. Their pollen is too large, heavy, and sticky to become airborne—which is why they must depend on bees and other insects to carry it from blossom to blossom.

“The real culprit in early spring is tree pollen, particularly from maple, birch, oak, and cottonwood trees. Oaks are also a problem in late spring as they continue to release pollen through June,” explains board-certified allergist Dr. Ghassan Safadi. “Later in spring and into summer, grass pollen starts to kick in. Pollen from weeds, such as ragweed, isn’t an issue for allergy sufferers in spring, but it is a significant problem from mid-August until the first frost,” he adds.

Why are cottonwood trees listed as a trigger for early spring allergies when those characteristic cottony tufts don’t start floating through the air until May? Actually, it’s not the white, fluffy seed carrier that causes allergy symptoms. It’s the pollen that the tree produces earlier in the season. The cotton-like seeds are very sticky and can trap allergy-provoking pollen from other trees; however, it’s the airborne pollen that you can’t see that is the true cause of allergy problems.

Dr. Safadi points out that multiple factors influence the level of pollen—and hence the severity of symptoms—that allergy sufferers are exposed to. Wind and dry conditions, for example, increase pollen exposure. Trees don’t release pollen when it’s raining, so symptoms tend to be low during a nice spring shower. However, rain tends to fragment pollen so exposure actually increases when those fragments dry out following a rainfall. “Also, the pollen level varies throughout the day. It tends to be highest in the early morning and evening and lowest around mid-day. So, allergy sufferers are advised to do yard work and other outdoor activities in the middle of the day. A good resource to help allergy sufferers monitor the pollen level is the website pollen.com,” notes Dr. Safadi.

To minimize pollen exposure, it’s recommended to keep your home’s windows closed and, if necessary, to operate the air conditioning for cooling. If you want to open windows for ventilation, do so only at mid-day or when it is actively raining. When driving, keep your car windows rolled up and set the air conditioning on recirculate to avoid pulling pollen into the car where it can concentrate. After spending time outdoors, it’s a good idea to rinse your hair and change clothes so you don’t contaminate other articles in the house, such as furniture and bedding, with pollen. Also, indoor air cleaning units can be very helpful in capturing airborne pollen (though, as Dr. Safadi observes, they’re not effective at capturing heavier allergens, such as dust mites). Regularly trimming the grass around your home so that it can’t reach the pollen-producing stage will help to minimize exposure in your immediate environment, as well.

Though avoidance is an important aspect of spring allergy control, various medications can also be helpful in managing symptoms. Over-the-counter antihistamines, for example, block the effects of histamine—the primary chemical released when the body is exposed to an allergen. Also available behind the counter are decongestants that improve nasal air flow and make it easier to breathe comfortably through the nose. However, there are some potential side effects to decongestants, which include
increased blood pressure, increased risk of stroke, increased urine retention in older men, and increased ocular pressure. “If you use a nasal decongestant spray, be sure to use it only for a short time. Long-term use leads to dependency and a rebound effect once the product is discontinued,” Dr. Safadi cautions.

Prescription-strength antihistamines and intranasal (nasal spray) corticosteroids are other options. The latter carry the potential risk of increased ocular pressure and glaucoma, but are very safe overall when taken under a physician’s supervision. A more aggressive medical option is the use of oral or injectable corticosteroids, which are typically administered once at the beginning of the allergy season and can be very effective. But again, potential risks are associated with their use. On a short-term basis, they can cause tissue atrophy at the injection site as well as increased blood sugar and blood pressure. With prolonged use, they increase the risk of cataracts, glaucoma, and osteoporosis.

All of the previously mentioned medications, while potentially effective at controlling allergy symptoms, are not curative. The only mode of allergy treatment with the potential to bring about a cure is immunotherapy, or “allergy shots.” Immunotherapy involves administering small, repeated doses of an allergen extract, the content of which is determined by either a skin or blood test and prepared by a certified allergist. The repeated injections gradually desensitize the patient to the allergen. Initially, the shots are administered one to two times per week, and it usually takes between 12 and 18 months to achieve full effect. In the meantime, other medications may be recommended to manage symptoms. Once the full effect has been reached, the injections are usually continued, but at a lower frequency, for four to five years.

Many patients can either discontinue or significantly decrease their allergy medications after 12 to 18 months of immunotherapy. And, in studies, patients with ragweed allergy have remained fairly symptom free for as long as ten years after discontinuing allergy injections.

More recently, sublingual immunotherapy—liquid drops administered under the tongue—has been increasingly offered in the United States. Though this form of immunotherapy works the same way allergy shots do, it is not currently FDA approved and potential risks and effective dosing are not yet fully known. “However, many studies of this treatment are currently underway, and we hope it will be a standard approved modality in the near future,” says Dr. Safadi.

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