

SINUSITIS – COLORADO SINUS INSTITUTE IS YOUR ONE-STOP-SHOP FOR RELIEF

DENVER - The experts at Colorado Sinus Institute discuss sinusitis and other sinus-related problems.

Colorado Sinus Institute has been serving the Denver metro area's sinus care needs for many years. The doctors there are constantly working to find new ways to help their patients who suffer from chronic sinusitis and allergic sinusitis. Today, we discuss different sinus conditions, as well as specific terminology, which often can be confusing.

“The terms ‘sinus’ and ‘sinusitis’ are often misused...” remarks Dr. Christopher Cote. “We try to educate our patients as much as possible on correct terminology and diagnosis. *Sinuses* are air-filled bony spaces in the face and head that open into the nasal passages. *Sinusitis* refers to swelling or inflammation of the sinuses and may be caused by infection, allergies, or external irritants. ‘*Sinus*’, as in “Doc, I have a sinus” is not a symptom, but an anatomic thing. ‘*Sinusitis*’ is a diagnosis or a condition, again not a symptom. We often have people come in and say they have sinusitis when they technically do not. So, we try very hard to analyze and sort out their symptoms to determine what’s really going on. *Rhinitis* refers to the swelling of the nasal passages, but can often mimic sinusitis. Also, anatomic abtruction such as that from a deviated septum, enlarged turbinates or even polyps and other masses inside the nasal passages can mimic sinusitis. Therefore, it’s important to examine thoroughly in order to get to the exact cause of each patient’s symptoms.”

“In your sinuses, inflammation of the nasal mucous membrane is called rhinitis.” says Dr. Cote. The symptoms of rhinitis can include sneezing and runny and/or itchy nose, which are caused by irritation and congestion in the nose. There are basically two types of this condition: allergic rhinitis and non-allergic rhinitis.

Allergic Rhinitis: Dr. Cote explains: “This condition occurs when the body’s immune system over-responds to specific, non-infectious particles such as plant pollens, molds, dust mites, animal hair, industrial chemicals such as tobacco smoke, foods, medicines, and insect venom.” During an allergic attack, antibodies, primarily immunoglobulin E (IgE), attach to mast cells (cells that release histamine) in the lungs, skin, and mucous membranes. Once IgE connects with the mast cells, a number of chemicals are released. One of the chemicals, histamine, opens the

blood vessels and causes skin redness and swollen membranes. When this occurs in the nose, sneezing and congestion are the result.

Seasonal allergic rhinitis or hay fever occurs in late summer or spring. Hypersensitivity to ragweed, not hay, is the primary cause of seasonal allergic rhinitis in 75 percent of all Americans who suffer from this seasonal disorder. People with sensitivity to tree pollen have symptoms in late March or early April; an allergic reaction to mold spores occurs in October and November as a consequence of falling leaves. “It seems like there is always a season for patients to suffer from sinus problems!” remarks Dr. Cote

Perennial allergic rhinitis occurs year-round and can result from sensitivity to pet hair, mold on wallpaper, houseplants, carpeting, and upholstery. Some studies suggest that air pollution such as automobile engine emissions can aggravate allergic rhinitis. Although bacteria is not the cause of allergic rhinitis, one medical study found a significant number of the bacteria *Staphylococcus aureus* in the nasal passages of patients with year-round allergic rhinitis, concluding that the allergic condition may lead to higher bacterial levels, thereby creating a condition that worsens the allergies.

Dr. Cote recommends: “Patients who suffer from recurring bouts of allergic rhinitis should observe their symptoms on a continuous basis. If facial pain or a greenish-yellow nasal discharge occurs, a qualified ear, nose, and throat specialist can provide appropriate sinusitis treatment.”

Non-Allergic Rhinitis: This form of rhinitis does not depend on the presence of IgE and is not due to an allergic reaction. The symptoms can be triggered by cigarette smoke and other pollutants as well as strong odors, alcoholic beverages, and extreme cold. Other causes may include blockages in the nose, a deviated septum, infections, and over-use of medications such as decongestants.

Rhinosinusitis: Recent studies by otolaryngologist–head and neck surgeons have better defined the association between rhinitis and sinusitis. They have concluded that sinusitis is often preceded by rhinitis and rarely occurs without concurrent rhinitis. The symptoms, nasal obstruction/discharge and loss of smell, occur in both disorders. Most importantly, computed tomography (CT scan) findings have established that the mucosal linings of the nose and sinuses are simultaneously involved in the common cold (previously thought to affect only the nasal passages). Otolaryngologists, acknowledging the inter-relationship between the nasal and sinus passages, now refer to sinusitis as rhinosinusitis.

The catalyst relating the two disorders is thought to involve nasal sinus overflow obstruction, followed by bacterial colonization and infection leading to acute, recurrent, or chronic sinusitis. Likewise, chronic inflammation due to allergies can lead to obstruction and subsequent sinusitis.

Other medical research has supported the close relationship between allergic rhinitis and sinusitis. In a retrospective study on sinus abnormalities in 1,120 patients (from two to 87 years of age), thickening of the sinus mucosa was more commonly found in sinusitis patients during July, August, September, and December, months in which pollen, mold, and viral epidemics are prominent. A review of patients (four to 83 years of age) who had surgery to treat their chronic sinus conditions revealed that those with seasonal allergy and nasal polyps are more likely to experience a recurrence of their sinusitis.

“Another important thing to consider is antibiotics use for rhinitis and sinusitis,” remarks Dr. Cote. “People may think they have sinusitis after only a few days of experiencing symptoms and they think they need antibiotics. This is actually rarely the case. We rarely recommend antibiotic treatment before 7-10 days of symptoms have passed, because most often the common cold or a virus is the culprit for the symptoms, and neither the common cold nor any virus responds to antibiotic treatment, thus making it a moot point. Antibiotics overuse can lead to a tolerance in patients, so future antibiotics treatment for something that they are actually needed for will not be as effective. Our doctors typically prescribe antibiotics only as a last resort and only for severe cases.”

For more information on sinusitis, allergies and other sinus health care, contact Colorado Sinus Institute at 850 E. Harvard Ave., Suite 505 / 303.744.1961 or online at www.coloradosinus.com.