

Sinusitis and Allergy

Sinusitis is an inflammation of the nasal sinuses. It may be a short-term, acute inflammation caused by bacterial infection such as the common cold. However, sinusitis can sometimes be a long term, chronic condition, complicated by allergies and/or structural problems in the nose, which can affect quality of life.

What are sinuses?

The sinuses are hollow cavities in the skull, located between and behind the eyes, in the forehead and cheeks. They are connected to the nose through small tubes, that are not much wider than a pinhead.

Nasal sinuses are located within the cheeks, around and behind the nose. Their main function is to warm, moisten and filter the air in the nasal cavity. They also help people to vocalise certain sounds.

Blocked sinuses can be due to untreated allergy, colds or polyps (growths on the sinus linings), and often cause pain in the face. Blocked sinuses also create an environment that favours the overgrowth of bacteria.

Colds and allergies are the main risk factors for developing sinusitis

Sinusitis is an inflammation of the nasal sinuses, commonly caused by bacterial infection following a viral infection such as the common cold. Other risk factors for developing sinusitis include untreated allergies, crooked nasal anatomy, smoking, nasal polyps and overuse of decongestant nasal sprays.

Sinusitis can be acute or chronic

There are two types of sinusitis:

- **Acute sinusitis** can last for up to three weeks, and is caused by bacterial infection in most cases. This usually occurs as a secondary complication of a viral respiratory infection such as the common cold, or as a result of untreated allergies.
- **Chronic sinusitis** can last for more than three weeks. This may be caused by bacterial infection, or more often, it is a chronic inflammatory disorder similar to bronchial asthma. Chronic sinusitis can last for months or years if not treated. Allergies, structural problems or immune system problems may lead to chronic sinusitis.

Signs and symptoms of sinusitis

The signs and symptoms of sinusitis vary depending on the severity of the inflammation, and which sinuses are involved. Symptoms and signs of sinusitis are:

- Thick, green or yellow coloured mucus from the nose or down the back of the throat.
- Loss of sense of smell or taste.
- Bad breath and/or bad taste in the mouth.
- Sore throat and/or cough.
- Tiredness.
- Temperature or shivers (fever).
- Facial congestion (a feeling of fullness) and pain.
- Headache,
- Toothache.
- Sensation of pressure that is worse with leaning forward.
- Obstructive sleep apnea.
- Post nasal drip.

It is important to consult your doctor if these signs or symptoms develop.

How is allergy a risk factor for developing sinusitis?

Allergy can cause chronic inflammation of the sinus and mucus linings. This inflammation prevents the usual clearance of bacteria from the sinus cavity, increasing the chances of developing secondary bacterial sinusitis.

If you test positive for allergies, your doctor can advise on appropriate measures and/or prescribe medications to control them, thereby reducing the risk of developing a sinus infection.

Environmental irritants may increase symptoms

People with sinus problems and allergies should avoid environmental irritants such as tobacco, smoke and odours, which may make symptoms worse.

Effective treatment depends on correct diagnosis

To confirm diagnosis, your doctor will take a medical history and conduct a physical exam. Skin tests or blood tests for allergen specific IgE may be needed, and X-rays of the sinuses may be taken.

Sinusitis versus rhinitis

Although many symptoms are similar, sinusitis should not be mistaken for rhinitis. Rhinitis is an inflammation of the mucus membrane of the nose, not the sinuses. It is often caused by allergic rhinitis (also known as hay fever), or increased sensitivity to irritants such as smoke, temperature changes or the overuse of decongestant nasal sprays. Poorly controlled rhinitis can lead to sinusitis.

Early treatment can reduce the need for medications

Around half of all sinus infections will resolve without antibiotics. In people with frequent infections it is important to treat the underlying problems, such as allergy, and to treat symptoms quickly to prevent the need for antibiotics.

Examples of treatments include:

- **Steam inhalations** use a bowl of hot water with a towel over your head. This will help to thin the mucus and make it easier to drain.
- **Salt water irrigation of the nose**, using a commercial preparation (spray or douche) will assist in nasal drainage.
- **Antibiotics** should be prescribed if symptoms persist.
- **Surgical** removal of disease tissue, polyps and/or drainage of sinuses may be required for some people with chronic sinusitis, if medications do not control symptoms.

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