CONDITION

Nasal polyps

Nasal polyps are soft, noncancerous growths linked to long-term inflammation inside the nose and sinuses.

WHAT IT IS
Soft, noncancerous growths in the nose and sinuses

BODY SYSTEM
Nose, sinuses, and airways

MAIN SYMPTOMS
Blocked nose, reduced smell, runny nose, facial pressure

WHAT CAUSES IT
Long-term inflammation; exact trigger often unknown

HOW IT IS DIAGNOSED
Nasal examination or endoscopy, sometimes CT imaging

MAIN TREATMENT
Nasal steroids, saline rinses, surgery, and biologic medicines

CAN IT BE CURED?
No - treatment controls symptoms, but polyps can return

IS IT AN EMERGENCY?
Sometimes - new eye symptoms or severe breathing trouble

LONG-TERM OUTLOOK
Usually manageable, though repeat treatment may be needed

Overview

Nasal polyps are soft, painless growths that form in the lining of the nose or sinuses. The sinuses are air-filled spaces in the bones around your nose and eyes. Polyps are not cancerous and are not the same as polyps found in the bowel.

They develop when the lining of the nose and sinuses stays inflamed for a long time. This condition is often called chronic rhinosinusitis with nasal polyps. "Chronic" means that it lasts for months or longer.

Small polyps may not cause noticeable problems. Larger polyps, or groups of them, can block airflow and stop mucus from draining normally. This may affect breathing through your nose, sleep, sense of smell, and day-to-day comfort.

Nasal polyps can often be controlled with medicines. Some people need surgery when symptoms remain troublesome. Even after effective treatment, polyps can grow back, so ongoing care is sometimes needed.

Symptoms

Symptoms usually affect both sides of the nose and last for weeks or months. They may include:

Polyps themselves are usually painless. Facial pain is less typical than pressure or congestion. Strong or one-sided pain may have another cause and should be assessed.

Symptoms can overlap with allergies, a common cold, a bent nasal septum, or swelling of the normal structures inside the nose. Having these symptoms does not necessarily mean that you have nasal polyps.

A growth or blockage on only one side needs careful examination. Most causes are not cancer, but one-sided symptoms can sometimes have a different explanation. Blood-stained discharge, repeated nosebleeds, or worsening one-sided blockage should be checked promptly.

- A blocked or stuffy nose
- A reduced or absent sense of smell
- A reduced sense of taste
- A runny nose or mucus draining down the throat
- Facial pressure or a feeling of fullness
- Snoring or mouth breathing
- Repeated sinus infections

Causes and risk factors

Nasal polyps form because of long-term inflammation in the lining of the nose and sinuses. The exact reason this inflammation develops is often unclear. In many people, the immune system reacts in a way that causes persistent swelling and fluid to collect in the lining.

Nasal polyps are associated with several other conditions:

Allergies may add to nasal inflammation, but they are not the sole cause of most nasal polyps. Treating an allergy may improve related symptoms without making the polyps disappear.

Nasal polyps in a child are unusual and may lead to tests for an underlying condition, including cystic fibrosis. This does not mean that every child with a suspected polyp has such a condition.

Some people with nasal polyps, asthma, and reactions to aspirin or similar painkillers have aspirin-exacerbated respiratory disease. Reactions can include worsening nasal symptoms, wheezing, or breathing difficulty after taking these medicines.

- Asthma, especially when it is difficult to control
- Sensitivity to aspirin or other nonsteroidal anti-inflammatory drugs like ibuprofen or naproxen
- Chronic sinus inflammation
- Cystic fibrosis, an inherited condition affecting mucus and several organs
- Allergic fungal rhinosinusitis, an immune reaction to fungi in the sinuses
- Certain uncommon conditions involving immune cells called eosinophils

Diagnosis

A healthcare professional will ask about your symptoms, how long they have lasted, and whether you have asthma, allergies, medicine reactions, or previous sinus treatment.

Larger polyps may be visible during an examination of the nose. They often look pale, smooth, and grape-like. A small camera called a nasal endoscope may be used to look deeper inside the nasal passages. This is usually done in an ear, nose, and throat clinic using local numbing medicine.

A CT scan may be arranged when more detail is needed. It can show where the sinuses are blocked and how extensive the inflammation is. CT imaging is also useful when surgery is being considered.

Other tests are chosen according to your history. These might include allergy tests, breathing tests for asthma, or tests for cystic fibrosis. A sample of tissue, called a biopsy, is not routinely needed for typical polyps on both sides. It may be recommended for an unusual-looking or one-sided growth.

Treatment and management

Treatment aims to shrink the polyps, reduce inflammation, improve breathing and smell, and

lower the chance of regrowth. The best approach is influenced by symptom severity, examination findings, other health conditions, and previous treatment.

Saline rinses wash mucus and irritants from the nose. They may ease congestion and help nasal medicines reach the lining. Water used for nasal rinsing should be distilled, sterile, or previously boiled and cooled. Tap water should not be used unless it has been treated as recommended for nasal rinsing.

Corticosteroid nasal sprays or drops reduce inflammation. They are a main treatment for nasal polyps and often need to be used consistently. Correct technique matters: the spray is generally directed slightly outward, away from the middle wall of the nose. Possible effects include irritation or minor nosebleeds.

A short course of corticosteroid tablets may sometimes be considered when symptoms are severe or smell has been lost. These medicines affect the whole body and can cause important side effects, especially with repeated use. They are therefore used selectively rather than as routine long-term treatment.

Antibiotics like amoxicillin or doxycycline do not shrink nasal polyps. They may be used if there is evidence of a bacterial infection, but long-lasting sinus inflammation is not automatically a bacterial infection.

Endoscopic sinus surgery may be offered if appropriate medical treatment has not provided enough relief. Instruments and a camera are passed through the nostrils, so external cuts are usually unnecessary. Surgery removes polyps and opens blocked sinus drainage pathways. Nasal medicines and saline rinses are commonly continued afterward because surgery does not remove the underlying tendency toward inflammation.

Biologic medicines are injections that target specific parts of the immune response. They may be considered for selected people with severe or recurrent nasal polyps that remain uncontrolled despite other treatment. They are not needed for most people.

If nasal polyps occur with aspirin sensitivity, a specialist may discuss aspirin desensitization in suitable cases. This involves carefully supervised exposure followed by ongoing treatment. It should not be attempted without specialist oversight.

Complications

Nasal polyps can interfere with nasal breathing and sleep. Persistent mouth breathing may cause a dry mouth or throat. Loss of smell can reduce enjoyment of food and make it harder to notice smoke, gas, or spoiled food.

Blocked sinus drainage may contribute to episodes of acute sinus infection. Signs can include

worsening facial pain, fever, thick discharge, or a sudden decline after symptoms had started to improve.

Nasal and sinus inflammation may also occur alongside asthma. When both conditions are present, worsening nasal symptoms can sometimes accompany poorer asthma control.

Treatment can have complications as well. Nasal steroids like fluticasone or mometasone may cause irritation or bleeding. Steroid tablets have broader risks, particularly when used repeatedly. Sinus surgery can cause bleeding or infection; serious injury to the eye or the fluid surrounding the brain is uncommon but recognised. Your surgical team should explain the expected benefits and risks before a procedure.

Prevention

There is no reliable way to prevent all nasal polyps. Some people have an underlying immune pattern, inherited condition, or sensitivity that cannot be changed.

If you already have polyps, controlling inflammation may reduce symptoms and delay regrowth. This often means using prescribed nasal treatment consistently, attending planned follow-up, and managing linked conditions such as asthma.

Avoiding tobacco smoke and known workplace irritants may reduce additional irritation. If you have a confirmed reaction to aspirin or similar painkillers, follow the medicine advice given by your healthcare team. Do not stop prescribed aspirin without medical advice, particularly if it is used to protect your heart or blood vessels.

Living with it and what to expect

Nasal polyps tend to be a long-term condition. Symptoms may improve and worsen over months or years. Medicines often reduce blockage and improve smell, but the response is not the same for everyone.

Smell may return as inflammation and blockage improve. However, recovery can be incomplete, especially after long-standing or repeated inflammation. If your sense of smell is reduced, working smoke and gas alarms are important. Check food dates rather than relying only on smell.

Some people remain comfortable with nasal treatment alone. Others have recurring symptoms and need surgery or advanced medicines. Polyps can regrow after surgery because the underlying inflammation may continue. Regrowth does not necessarily mean that the surgery failed; surgery may still provide meaningful periods of better breathing and sinus drainage.

Routine follow-up is especially useful if you have asthma, aspirin sensitivity, repeated infections, or previous sinus surgery. Follow-up may involve reviewing symptoms, checking nasal spray technique, examining the nose, and adjusting long-term management.

Nasal polyps are not contagious. They do not spread to other people, and typical nasal polyps do not turn into cancer.

When to get medical help

Arrange a routine appointment if nasal blockage, reduced smell, or sinus symptoms last longer than expected for a cold, keep returning, or interfere with sleep and daily activities.

Seek a prompt assessment if you develop:

Seek urgent medical help for swelling or redness around an eye, double vision, reduced vision, severe headache, confusion, a stiff neck, or rapidly worsening illness with fever. These can be signs that an infection has spread beyond the sinuses.

Call emergency services for severe breathing difficulty, blue or grey lips, collapse, or a serious reaction after taking aspirin or another medicine.

- Blockage or a visible growth mainly on one side
- Repeated nosebleeds or blood-stained nasal discharge
- Increasing one-sided facial pain
- A significant change in symptoms after previous treatment
- Asthma symptoms that are becoming harder to control

Common questions

Will nasal polyps go away on their own?

They are unlikely to disappear permanently without treatment. Their size and symptoms may fluctuate, and anti-inflammatory treatment can often shrink them. Polyps can return after medicines are stopped or after surgery.

Can nasal polyps turn into cancer?

Typical nasal polyps are noncancerous and do not become cancer. However, not every nasal growth is a polyp. A one-sided, bleeding, or unusual-looking growth may need further examination or a biopsy to confirm what it is.

Are nasal polyps caused by allergies?

Not usually by allergies alone. Allergies can increase nasal inflammation and congestion, but nasal polyps are more strongly linked to persistent sinus inflammation and certain immune responses. Allergy treatment may still help if allergies are contributing to your symptoms.

Can nasal polyps grow back after surgery?

Yes. Surgery removes existing polyps and opens the sinuses, but it does not eliminate the underlying tendency toward inflammation. Ongoing nasal treatment and follow-up can help control regrowth.

Can I remove or pull out a nasal polyp myself?

No. Pulling or cutting tissue inside the nose can cause heavy bleeding, infection, or injury. A suspected polyp should be examined so that the cause of the blockage can be confirmed and safe treatment offered.

Will treatment bring back my sense of smell?

It may. Smell often improves when swelling and blockage are reduced, but recovery cannot be guaranteed. Long-standing inflammation can affect smell even when the nasal passages become more open.

Sources

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