Sinus problems

Inflammation and infection

Just about everyone has experienced sinus congestion at some point, often in conjunction with a cold caused by a virus. It’s unpleasant, but the congestion usually goes away within a week or so as the body fights off the illness.

However, sinus congestion and a feeling of sickness can linger or worsen. This may mean that a bacterial infection has developed within congested sinus passages. Your immune system can usually fight off this infection, too, but your doctor may prescribe an antibiotic medication to help clear it.

Still, not all sinus problems are this straightforward. Sinus infections can recur on a frequent basis, and sinus inflammation (sinusitis) can smolder indefinitely. In these cases, a wider range of diagnostic tests and treatment options are often used.

Blocked passages

Your sinuses are a network of air-filled chambers in the bones around your nose. The sinuses make mucus, which cleans and moisturizes your nasal passages. Lining the inside of your sinuses are little hairs (cilia) that are constantly sweeping the mucus through your sinuses. Sinus trouble typically begins when the sinuses become irritated and inflamed, causing sinus tissues to swell. Expansion of tissues can narrow or close off small openings (ostia), making it hard for mucus to drain out of sinus cavities.

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Once drainage is blocked, mucus and air pressure build, causing a feeling of stuffiness and congestion. The stagnant, moist environment of a blocked sinus cavity gives bacteria a place to thrive and a secondary bacterial sinus infection can develop.

Viral vs. bacterial
Most cases of sinusitis are acute, meaning they come and go within less than a month. Acute sinusitis often begins with a common cold. Within the first several days of a cold, the cause of sinus congestion is usually viral. Antibiotic medications have no effect on viral infections and typically aren’t recommended within the first week of developing a cold. However, the infection can shift to being bacterial, where antibiotics may have a role in treatment.

Determining if sinusitis is caused by a viral or bacterial infection is tricky. Congestion, facial pressure, drainage of mucus, cough, headache, ear pain, fatigue and feeling unwell can occur in both viral and bacterial infections. Still, the likelihood of having a bacterial sinus infection increases if you have:

Tips to feel better

Whether acute sinusitis is caused by a viral or bacterial infection, you may be able to relieve symptoms with:

- Warm compresses applied to the face or by breathing steam from a pot of hot water or a warm shower.
- Nonprescription pain relievers such as acetaminophen (Tylenol, others).
- Short-term use of nonprescription nasal sprays or oral decongestants. These can help shrink sinus tissues, possibly helping to relieve sinus pressure or encourage sinus drainage. However, when used for more than three days continuously, nasal sprays can have a rebound effect and make congestion worse. Oral decongestants can cause high blood pressure and elevated pulse rate, and can worsen urinary outflow from prostate enlargement.
- Nasal irrigation. While this may help relieve symptoms it won’t get rid of the infection sooner because the infected sinus cavities are usually blocked off.
- Prescription nasal corticosteroid sprays. These may speed healing in some with bacterial sinus infections with milder symptoms or with allergies as an underlying cause.
- Self-care, including drinking plenty of fluids to help thin mucus and avoid alcohol and tobacco smoke, which can contribute to inflammation.

Varied causes
Causes of sinus inflammation may include:

- **The common cold** — This is caused by a virus and is the most frequent cause of sinusitis. Your body can typically fight off this infection within seven to 10 days, and your sinuses return to feeling normal. However, between 0.5 and 2 percent of viral colds go on to become bacterial sinus infections.
- **Nasal allergies (allergic rhinitis)** — This may cause recurrent, seasonal or constant (chronic) sinus inflammation and swelling.
- **Fungal infections** — Chronic inflammation may be caused by an inflammatory reaction to fungi inhaled from the air.
- **Pollutants** — Exposure to tobacco smoke or air pollution can cause or worsen sinus inflammation.

Ostia blockage can have additional root causes, including:

- **Structural blockage** — Small growths of tissue (nasal polyps) or narrow nasal passageways (deviated septum) may restrict or block nasal airways or sinus drainage.
- **Airplane travel** — Rapid altitude or pressure changes can seal off a sinus cavity long enough for a bacterial infection to develop. A dose of nasal decongestant spray before a flight may help prevent this.
- **Other causes** — Nonallergic rhinitis, a festering dental infection, immune system dysfunction, cystic fibrosis or an abnormality of cilia may lead to sinus problems.

Some conditions may be mistaken for sinusitis, including migraines or dental or jaw pain.
When sinus passageways are obstructed by nasal tissues, surgery may sometimes be used to remove the obstructing tissues.

Persistent symptoms lasting for seven days or more, particularly if they initially improve, then worsen

Thick, yellow or greenish mucus

Facial pain or tenderness over the sinuses, particularly if it’s worse on one side of the face

Pain in the upper teeth, particularly on one side of the mouth

The body usually can fight off a bacterial sinus infection, especially if symptoms are mild. About 70 percent of the time, symptoms of acute bacterial sinus infections go away within two weeks without antibiotics.

If appropriate, your doctor may prescribe antibiotics to kill the bacteria. About 85 percent of those taking antibiotics for a bacterial infection are symptom-free within two weeks. Whether you are prescribed an antibiotic or not, treatment to relieve symptoms can help you feel better as healing occurs.

When it persists

An acute sinus infection can persist despite treatment, recur within a week or two of treatment or recur several times a year. In addition, chronic sinusitis lasting 12 weeks or longer can develop. Symptoms of chronic sinusitis are generally more subtle than those of acute sinusitis. Congestion, headaches, loss of smell and mucus drainage down the back of the throat may occur, but facial pain is often milder and you may not feel as sick.

Chronic sinusitis is often related to an immune system overreaction to something in the environment such as dust, pollen or fungi. This irritation itself doesn’t involve an infection, but acute bacterial infections can develop within the swollen sinuses.

Whether acute or chronic, persistent sinusitis often involves several tests to determine a cause. These may include allergy testing, visualization of the sinus passages using a thin, flexible scope (nasal endoscope) or imaging tests such as computerized tomography (CT) scans.

Treatment depends on the diagnosis. A stubborn acute bacterial infection may clear up with a different antibiotic or an antibiotic taken for a longer period of time. Short-term use of oral corticosteroids may calm inflammation or help shrink a problem polyp. If there’s a structural problem, surgery using an endoscope and various small tools may sometimes be used to open up sinus passages by removing bone, tissue or polyps.

With chronic sinusitis, a cure usually isn’t possible, but symptoms can often be well managed with:

- **Nasal corticosteroids** — These are used daily to calm sinus inflammation.
- **Nasal irrigation** — This involves gently squirting or pouring a warm, purified saltwater solution into your nose with a squeeze bottle, bulb syringe or neti pot. This can be very effective. Your doctor may recommend adding medication to the irrigation fluid to help fight inflammation or infection.
- **Allergy treatments** — Avoiding allergens, taking antihistamine medication and being desensitized to an allergen with allergy shots are options for tackling inflammation due to allergic rhinitis.

Seeking care

If you have sinusitis that has lasted seven to 10 days, see a doctor. If you have signs and symptoms such as severe pain, high fever, or double or blurred vision, seek immediate care. Complications include worsening of asthma, infection of the lining of the brain (meningitis) and vision problems.

**Health tips**

Dealing with erectile dysfunction

Sexual arousal in men is a complex process involving the brain, hormones, emotions, nerves, muscles and blood vessels. Problems with any of these may result in difficulty initiating or maintaining an erection (erectile dysfunction). Often, other factors come into play, such as cardiovascular disease, diabetes, obesity, tobacco use, certain medications and trauma.

With that in mind, take steps to improve your sex life by:

- **Getting more physical activity** — Data shows that men who exercise for 30 minutes a day can reduce their chances of developing erectile dysfunction by 41 percent compared with men who are sedentary.
- **Watching your waistline** — Waist circumference is often a predictor of hypertension, diabetes, obesity and coronary artery disease. One large study found that men with a waist circumference of 40 inches or less and who were also physically active maintained good erectile function. Abdominal fat also may be associated with low testosterone.
- **Eating a healthy diet** — What you eat can improve the health of your heart and blood vessels and thereby reduce erectile dysfunction. One study found people who ate a diet rich in whole grains, fruits, vegetables, legumes, nuts and olive oil were up to 30 percent less likely to develop cardiovascular disease than were those on a general low-fat diet. Another study found that men who ate a similar diet for two years had better sexual function. ♦
Pain after shingles

Managing postherpetic neuralgia

Getting through a bout of shingles earlier this year wasn’t easy, but what’s occurred since then has been an agonizing experience. In some, shingles may be followed by severe pain due to a condition called postherpetic neuralgia (post-hur-PET-ik noo-RAL-juh).

Postherpetic neuralgia is a complication of shingles. Ongoing pain from this complication can limit your daily activities and cause depression, weight loss and insomnia. Although there’s no cure for postherpetic neuralgia, there are treatment options to help ease symptoms. For most people, the condition improves with time.

The lineup

Many older adults had chickenpox during their childhood. The chickenpox virus is generally a one-time experience, but there can be a backlash. The immune system never totally eliminates the virus, and what’s left of it can remain inactive in your nerve cells. Years later, factors such as age, illness, medications that suppress your immune system or stress may cause the dormant virus to reactivate and develop into shingles (herpes zoster).

With shingles, the reactivated virus travels along nerve fibers that extend to your skin, causing blisters and pain. The nerve pathway of the virus typically shows up as a trail of rash and blisters. Most commonly this may be a band around your trunk, usually on just one side of your body, but it may also occur on your face or down an arm or leg.

Postherpetic neuralgia occurs if nerve fibers are damaged during a shingles outbreak. When damaged nerve fibers can’t send messages from your skin to your brain as they normally would, those messages become...
confused and exaggerated. This muddle produces the chronic and often excruciating pain of postherpetic neuralgia that may persist for months and even years after the disappearance of the shingles rash and blisters.

Those at greatest risk of postherpetic neuralgia are older adults. Among those 70 years and older who get shingles, more than 18 percent develop postherpetic neuralgia that persists more than three months after the episode of acute shingles. Many studies show more than half of people age 60 and older develop postherpetic neuralgia.

Signs and symptoms of postherpetic neuralgia generally occur in the same area as the shingles outbreak.

Some describe the pain as burning, sharp, or deep and aching. Sensitivity to light touch — even the touch of clothing on the affected skin — can be extreme. Less commonly, an itchy feeling or numbness may occur. If involved nerves also control muscle movement, there may be muscle weakness or paralysis, although this is rare.

**Prevention is best**

Preventing the long-standing pain of postherpetic neuralgia goes back to preventing shingles, for which there’s a vaccine called Zostavax. Not only does the vaccine reduce by about half the risk of shingles in older adults, but it also cuts the risk of postherpetic neuralgia by almost 70 percent.

The Centers for Disease Control and Prevention recommends adults 60 and older get the vaccine regardless of whether they’ve had shingles in the past.

Although the shingles vaccine has been available since 2006, a recent study indicates that only a small percentage of older adults have opted to get it. The study, of more than 766,000 Medicare beneficiaries, found that less than 4 percent of seniors had been vaccinated against shingles.

If you haven’t had the vaccine yet, or aren’t certain you have, talk with your doctor or pharmacist.

If you do develop shingles, it’s important to seek early antiviral drug treatment from your doctor. Acyclovir (Zovirax), famciclovir (Famvir) and valacyclovir (Valtrex) are antivirals used to treat shingles and can cut in half the risk of developing postherpetic neuralgia if they’re started within 72 hours of the rash appearance. Shingles typically starts with pain, itching or tingling in an area where the rash then develops in matter of days.

**Treatment options**

No single treatment works in all people who have postherpetic neuralgia. Managing the pain and finding relief often involve a combination approach. Options you and your doctor may consider include:

- **Lidocaine skin patches** — These patches contain the topical pain-relieving medication lidocaine. These prescription patches can be cut to fit only the affected area and provide relief for hours at a time.

- **Capsaicin** — Capsaicin is an extract of chili peppers. It’s available as a nonprescription, low-concentration cream (Capsasin-P, Zostrix) and may improve pain over several weeks if you can tolerate it — many people experience a burning sensation from it. As an alternative, a capsaicin skin patch is available at a much higher concentration, but it’s given only in your doctor’s office after first applying a numbing medication to the affected area. A single application, which may take up to two hours, can decrease pain for up to three months in some people. If effective, the application can be repeated every three months.

- **Anti-seizure medications** — Some of these drugs can help reduce pain by stabilizing abnormal electrical activity in your nervous system caused by injured nerves. Gabapentin (Neurontin, Gralise), pregabalin (Lyrica) or another anti-seizure drug may be prescribed to help control burning and pain. Side effects may include dizziness, drowsiness and unclear thinking.

- **Antidepressants** — Certain antidepressants — such as nortriptyline (Pamelor), amitriptyline, duloxetine (Cymbalta) and venlafaxine (Effexor XR) — can influence key brain chemicals that play a role in depression and how your body interprets pain.

Antidepressants are prescribed at lower dosage levels for postherpetic neuralgia than are necessary to treat depression. Side effects vary, depending on the drug, but may include drowsiness, dry mouth, lightheadedness and weight gain.

- **Opioids** — Prescription pain medications — such as oxycodone, methadone and morphine — may be prescribed for pain that’s not responding to other treatments. Opioids may cause dizziness, drowsiness, confusion and constipation. They can also be addictive, although that risk is generally low when used as prescribed under your doctor’s regular supervision.

- **Tramadol (Ultram, Conzip)** — This prescription pain reliever may be of help for some. Side effects are similar to opioids.

With shingles, the reactivated virus travels along nerve fibers that extend to your skin, causing blisters and pain.
Avascular necrosis

Death of the hipbone

You and your doctor discussed the potential side effects of taking high-dose corticosteroid therapy to control your autoimmune disease. Among them was the low but increased risk of small areas of bone death called avascular necrosis. Still, your autoimmune disease was bad enough that you both agreed that the benefits of corticosteroids outweighed the risk.

When you developed hip pain many months later, it was nevertheless surprising to learn that the bone of your hip joint was dying — and that you’d likely need surgery to fix it.

Lost blood flow

Your hip is a ball-and-socket joint. The socket is located in the pelvis, and the ball forms the upper end of the thighbone (femur). The surface of the ball and socket are covered with cartilage — a tough, slippery material that reduces friction during movement.

Like all other tissues in the body, bone tissue requires nourishment from a steady supply of blood. Avascular necrosis develops when blood supply to an area of bone is somehow reduced or blocked. This leads to an area of bone tissue death. In the case of avascular necrosis of the hip, bone tissue death occurs on the ball portion of the joint. Bone death can lead to tiny breaks in the bone and the eventual collapse of the area of bone affected.

Avascular necrosis can occur in a number of locations, but it most commonly occurs in the hip joint. It’s often not clear why it occurs. However, risk factors include:

- Joint or bone injury — A traumatic injury, such as a dislocated joint, may damage nearby blood vessels.
- Excessive alcohol — Several alcoholic drinks a day for several years can cause fatty deposits to form in the vessels that supply blood flow to bone, disrupting blood flow.
- Corticosteroids — These increase risk when taken long term at any dose or short term at high doses. Like alcohol, corticosteroids can cause fatty deposits to form in your blood vessels.

Several medical conditions — such as systemic lupus erythematosus (SLE), diabetes or sickle cell anemia — can increase risk, as can certain medical treatments such as radiation therapy for cancer and kidney transplant.

Avascular necrosis is more likely to affect men than women, and it more commonly occurs in those ages 30 to 60. However, it can occur at any age, and in certain subgroups — such as people with SLE — it may affect women more than men.

Worsening hip pain

In the early stages of avascular necrosis, many people have no pain. However, as the disease progresses, groin, thigh or buttock pain may develop, and the hip joint may hurt when you put weight on it. Left untreated, this may gradually progress over months or years to where there’s pain even at rest or at night. Joint movement and standing or walking also becomes increasingly difficult and painful.

If you experience persistent pain in the hip joint talk to your doctor. Many disorders can cause joint pain, and a physical examination coupled with imaging tests such as X-rays or magnetic resonance imaging (MRI) or other tests can usually diagnose the problem.

Determining treatment avenues usually depends on factors such as age, the amount of bone affected and whether the bone has collapsed. If there’s a suspected cause — such as corticosteroid use or alcohol overuse — addressing those factors is important, as it may compromise other treatment attempts or increase the risk of developing avascular necrosis in another location.

For select older adults, attempts to preserve the joint or delay the need for hip replacement occasionally may be an option. However, it’s much less commonly pursued than it is in people under 50. If caught early enough in an older adult, consideration may be given to surgical techniques that include:

- Core decompression — This involves removing part of the inner layer of your bone. This can reduce disease-aggravating pressure and reduce pain. It may also stimulate healthy bone growth and formation of new blood vessels.
- Bone transplant (graft) — This procedure can help strengthen the area of bone affected by avascular necrosis. The graft is a section of healthy bone taken from another part of your body.
- Bone reshaping (osteotomy) — A wedge of bone from below the joint is removed to help shift your weight off the damaged bone.

Hip replacement common

In older adults with avascular necrosis, the collapse of bone usually happens fairly quickly, and diagnosis comes at a point when preservation of the joint isn’t possible. If the bone has collapsed, the main treatment option is total hip joint replacement. Avascular necrosis is the underlying cause of an estimated 10 percent of hip replacements.

Hip replacement is often very successful in restoring function and relieving pain. People who have hip replacement for avascular necrosis have comparable results to those who receive hip replacement for more common problems such as arthritis.
Inguinal hernia

Heading off trouble

It started as a little bulge in your upper groin area. It’s not been painful, but lately it seems to be getting larger. When you lie down, the bulge disappears — when you’re standing, it returns. Your doctor assures you that this is a common problem, and it has all the markings of being an inguinal hernia.

Although the cause isn’t always apparent, inguinal hernia occurs when a weakened area in your lower abdominal muscles gives way enough so that soft tissue protrudes through the muscle wall into the groin area. While the opening on its own isn’t dangerous, it may pose a threat — potentially life-threatening — if soft tissues get trapped in that opening. That’s why it’s important to have your doctor check a noticeable or painful bulge that occurs in your groin on either side of your pubic bone.

Determining the problem

Identifying an inguinal hernia is the first step in deciding if surgical repair is necessary, and if so, how soon it should be done.

Inguinal hernia is just one type of hernia that commonly develops in the abdominal area — it’s also the most common type requiring surgical treatment. Inguinal hernia occurs along the inguinal canal, which is an opening in the abdominal muscles.

Development of inguinal hernia may be related to:
- Increased pressure in the abdomen, as may occur due to pregnancy or fluid in the abdomen (ascites)
- Straining during bowel movements or urination
- Chronic coughing or sneezing
- Lifting heavy objects

Know the signs and symptoms

Some inguinal hernias don’t cause any symptoms and may go unnoticed until discovered during a routine medical exam. If you stand up — and especially if you cough or strain — symptom-free hernias can often be seen and felt as a bulge in the area on either side of your pubic bone. The bulge of an inguinal hernia may include soft tissues or part of your intestine. Some migrate into the scrotum. Other signs and symptoms may include:
- A burning, gurgling or aching sensation in your groin
- Sharp pain or discomfort in your groin, especially when bending over, coughing or lifting
- A sensation of weakness or pressure in your groin

Inguinal hernias that move in and out of the opening — depending on whether you’re lying down or standing — often can be gently massaged by your doctor back into your abdomen.

A more serious concern arises if the omentum or intestine becomes trapped (incarcerated) in the abdominal wall and can’t be massaged back inside. The risk is that it may become strangulated, meaning the blood supply to the bowel is cut off. This can lead to gangrene of the bowel and is potentially fatal.

Signs and symptoms of a strangulated hernia may include nausea, vomiting or both, sudden pain that intensifies quickly, fever, rapid heart rate, a hernia bulge that’s tender and skin that’s red, purple or dark. If you experience any of these, call your doctor right away or seek immediate medical attention. Emergency surgical treatment is necessary to restore blood supply to the intestine and repair the hernia.

Time for surgery

The definitive inguinal hernia treatment is surgery. These repairs are among the most commonly performed surgical procedures.

Your doctor may suggest a watch-and-wait approach if your hernia isn’t bothering you. Many studies suggest that surgery shouldn’t be done before symptoms arise. However, as soon as even mild symptoms do arise, your doctor may want to consider surgery.

The two general types of hernia repair operations are traditional open and minimally invasive laparoscopic. During open repair, a surgeon makes an incision in the groin and pushes the protruding omentum or intestine back into the abdomen. Synthetic mesh is often used to reinforce the weak area. Laparoscopic repair is done through several small abdominal incisions.

Generally, an overnight hospital stay isn’t required with these procedures. After open repair, it may take four to six weeks before you’re fully able to resume all of your normal activities. Laparoscopy may allow for a quicker return to regular activities.

Laparoscopic repair isn’t suited for everyone. Very large inguinal hernias are better managed with open repair, including those where the intestine is pushed down into the scrotum. Scarring from previous pelvic surgery — such as surgery to remove your prostate (prostatectomy) — makes laparoscopic inguinal hernia repair difficult to do.

Talk with your surgeon to help determine which procedure is best for you. Your overall health and any other medical conditions you may have are important factors in that decision.

Synthetic mesh is often used to reinforce and support a weak area after repair of an inguinal hernia.
Second opinion

Q I have an abdominal aortic aneurysm. Since my last doctor visit, it has grown just a single centimeter. As a result, my doctor is suddenly saying I need to have surgery because it could rupture. Does such a small change really mean the difference between surgery and being able to leave it alone?

A Yes, it may. Surgical repair of a bulge (aneurysm) in your aorta — the main artery in your abdomen — can be a lifesaving procedure. That’s because abdominal aortic aneurysms can rupture, causing internal bleeding that’s fatal 80 to 90 percent of the time.

The key question is when does the risk of a rupturing aneurysm outweigh the risk of surgical repair?

Generally, abdominal aortic aneurysms that are less than 5 centimeters (cm) in diameter — and are growing less than a half a centimeter a year and not causing symptoms — aren’t surgically repaired.

However, when an aneurysm reaches the size of 5 cm in women and 5.5 cm in men — or if it’s growing quickly or causing symptoms — then surgical repair is typically recommended.

One centimeter may not seem like much of a difference, but as shown in the chart that follows, the risk of having an aneurysm rupture changes rapidly as the aneurysm grows larger.

The chance of rupture is fairly low when the aneurysm diameter is below 5 to 5.5 cm. After that, the risk that it could rupture begins to rise, reaching up to 95 percent at 8 cm or greater.

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<thead>
<tr>
<th>Aneurysm diameter in centimeters</th>
<th>Risk of rupture</th>
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<td>Less than 4 cm</td>
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Q I have mild to moderate dry eyes. Artificial tears help somewhat. Is there something else I can do that might help keep my eyes from drying out?

A You might try taking fish oil supplements. Several studies have noted an association between decreased dietary levels of omega-3 fatty acids and dry eyes.

A recent, small study set out to see if fish oil supplements might help relieve dry eyes. Participants had mild to moderate dry eyes and were randomly divided into two groups. One group took a daily supplement that contained 450 milligrams (mg) of eicosapentaenoic acid (EPA), 300 mg of docosahexaenoic acid (DHA) from fish oil and 1,000 mg of flaxseed oil. The other group took a placebo.

After 90 days, researchers found that those who took the fish oil supplement had increased tear volume compared with those who took the placebo. In addition, 70 percent of the fish oil group no longer had dry eye symptoms compared with 37 percent in the placebo group.

More recently, another study found that fish oil supplements that contained the omega-3 fatty acids EPA and DHA alone — without the flaxseed oil component — improved dry eye symptoms, increased tear volume and slowed the rate of tear evaporation.

Artificial tears are usually the first “go-to” treatment for dry eyes. You may find fish oil supplements to be an additional help.

Have a question or comment?
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