

## PERSONAL HEALTH

# When Trouble Hits Those Holes in Your Head

By JANE E. BRODY

You've had a cold for five to seven days and thought you were getting better. Then it grew worse. More congestion, increasing fatigue and now headache or facial pain around your nose or eyes or upper teeth. You guessed it was a sinus infection.

Depending on the severity of the symptoms, the doctor's examination and inclinations about treatment, you may be prescribed an antibiotic.

But is this what you need to get better?

Chances are, it is not. Most cases of acute sinusitis are caused by viruses, not bacteria, and taking an antibiotic does nothing more than enrich the pharmaceutical companies and increase the chances of being infected with drug-resistant bacteria.

The average adult catches two or three colds a year, and 0.5 to 2 percent of them are complicated by bacterial infections. In other words, if antibiotics are prescribed for most sinusitis cases, they are most likely being way overprescribed.

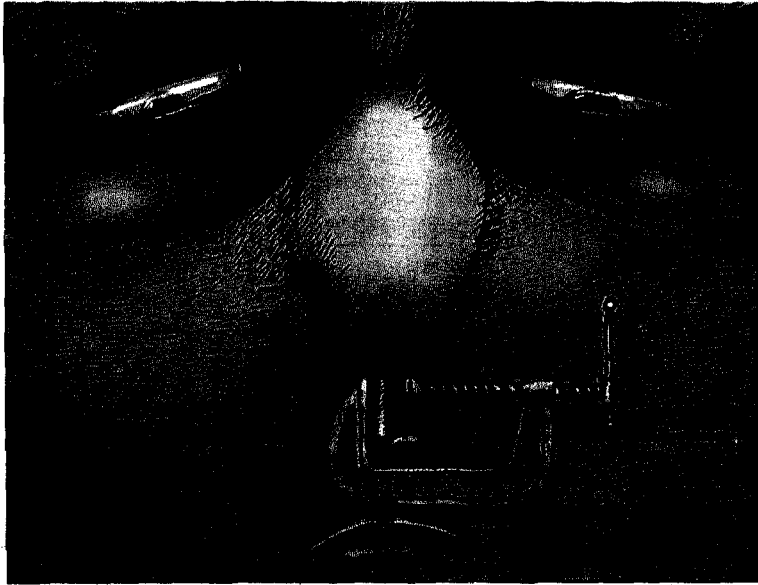
In the course of a year, an estimated 37 million Americans experience sinusitis, the fifth most common diagnosis for which antibiotics are prescribed in outpatient settings.

But how is the doctor to know whether an antibiotic is what is needed? Unless a sample of the pus in the nasal cavities is examined under a microscope — a rare act in most physicians' offices — there is no certain way to tell.

Doctors are advised to use antibiotics to treat sinusitis when at least three of four signs are present: purulent (yellowish or greenish) nasal discharge predominantly on one side, local facial pain mainly on one side, purulent nasal discharge on both sides or pus in the nasal cavity.

Many physicians as well as patients take purulent nasal discharge lasting seven or more days as the primary indication of a bacterial sinus infection. Yet, study after careful study has shown no reliable benefit of antibiotics when doctors try to apply this or any of the other criteria in deciding on drug treatment.

In the latest study, published last month in *The Journal of Family Practice*, no significant benefit over a placebo was found from using the antibiotic amoxicillin among 135 patients with typical indications of a sinus infection. All the patients complained of sinusitis, with pus in the nasal cavity, facial pressure or nasal



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discharge lasting longer than seven days.

A small subgroup of patients receiving the antibiotic became better faster than the others. But the researchers were unable to discern anything about those patients in advance of treatment that indicated a bacterial infection, as opposed to a viral one.

That does not mean that antibiotics are useless in treating sinusitis. But it does mean more research is needed to help doctors determine who is most likely to benefit from the costly and potentially harmful drugs.

Many people who do not seek medical care for an apparent sinus infection try to treat the problem on their own, typically buying one or more over-the-counter "sinus remedies."

Many millions of dollars are spent on such "remedies," none of them getting at the cause of the problem.

## So What Is Sinusitis?

Sinusitis is simply an inflammation of the lining of the sinus cavities. There are four pairs of sinuses, which are spaces normally filled with air in the front of the skull: over the eyes in the brow area; inside each cheekbone; just behind the bridge of the nose and between the eyes; and in the upper region of the nose and behind the eyes. The membranes that line the sinus cavities are moistened by thin mucus.

Sinus inflammation has many causes, including infection by viruses, bacteria or fungi; an allergic re-

action to a food or environmental substance; or the response to an inhaled irritant like tobacco smoke or outdoor or indoor air pollution.

Each sinus cavity has an opening into the nose to allow a free exchange of air and mucus. But if something causes swelling within the nose, air can be trapped inside a sinus cavity, along with pus and other secretions, causing increased pressure on the wall of the sinus. Or the congestion can create a vacuum in a sinus cavity. Either causes pain when air can no longer pass freely in and out of a sinus cavity.

Typical symptoms of sinusitis depend on which cavity or cavities are involved. These are some of the symptoms:

- ☞ A headache upon awakening.
- ☞ Pain when the forehead is touched.
- ☞ An ache in the upper teeth or jaw or a cheek that is tender to the touch.
- ☞ Swollen eyelids and tissues around the eyes and pain between the eyes.
- ☞ Loss of smell, stuffy nose and tenderness on the sides of the nose.
- ☞ Earaches, neck pain and a deep aching on the top of the head.

There are three ways to characterize sinus attacks: acute, lasting three weeks or less; chronic, three to eight weeks and, perhaps, months or years; and recurrent, referring to several acute attacks a year.

It is reasonable to conclude that you have acute sinusitis when a cold becomes worse after a week or persists for more than two weeks, espe-

cially if it is accompanied by a purulent nasal discharge that fills paper tissue after tissue.

Chronic sinusitis, on the other hand, is most likely a result of an airborne allergy to substances like mold, dust and pollen that cause chronic allergic rhinitis (nasal inflammation).

## Seeking Treatments

The treatment for sinusitis is best determined by its likely cause. With or without antibiotics, most cases of acute sinusitis clear up in two weeks.

An acute attack, at the outset, is best treated symptomatically.

The most important action is drinking lots and lots of liquids, which help thin secretions in the nose and sinuses and promote drainage. Hot soup and spicy foods help, as well. You can also use a saline nose spray or even a nasal saline wash (each is sold over the counter), as many times a day as needed to loosen secretions. And each is harmless.

Humidifying the air also helps, as long as you prevent mold growth. The preferred method is to wet a washcloth with hot water, or heat a wet cloth in the microwave for about two minutes. Hold it over the nose and mouth and breathe the warm moist air.

Another approach is to use a portable battery-operated humidifier that delivers moist air through a mask over the nose and mouth. If you use a humidifier or vaporizer, you must thoroughly clean the equipment every day and refill it each time with clean water to prevent the growth of allergenic molds.

During a sinus attack, avoid alcoholic beverages, which increase nasal and sinus swelling. Flying can also make things worse. If you're using an oral or a nasal decongestant, limit treatment to three days, lest you create a rebound reaction that worsens the inflammation.

If inflammation seems chronic and persists despite 10 days' antibiotic therapy, consider consulting an allergist to find the cause. While self-treatments described above can reduce symptoms, significant relief can result from the use of a prescribed nasal steroid that is inhaled.

Humming can also help by increasing air flow to the sinuses, as can nasal strips that widen the nasal passages. But there is no scientific evidence — only testimonials — to support the benefit of colloidal silver nose drops.