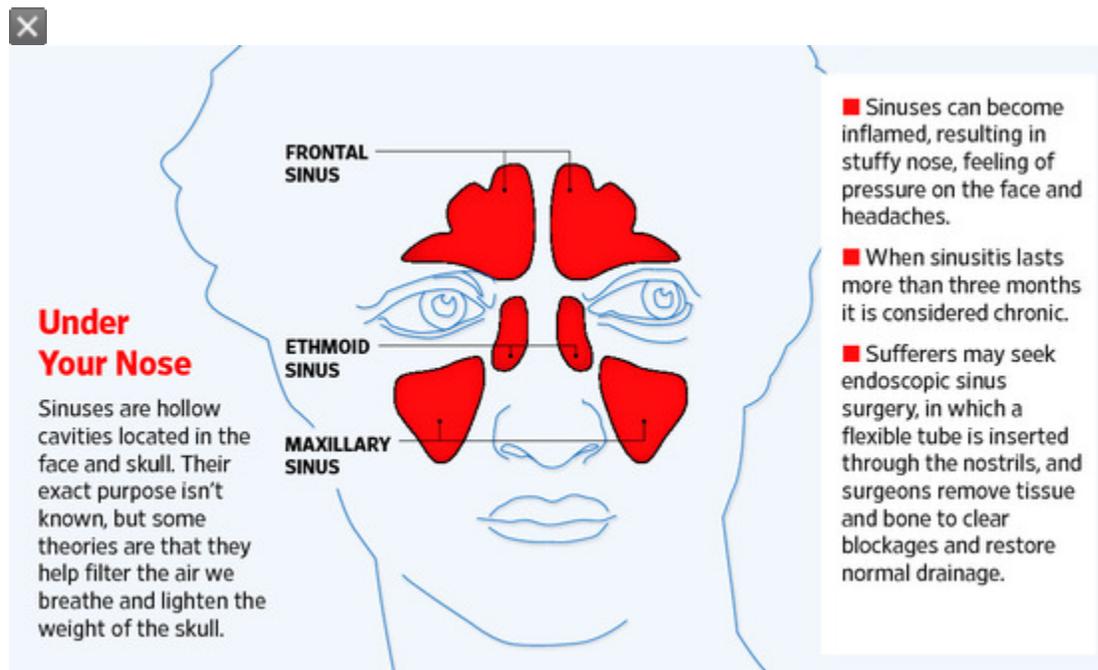


Breathe Easier With Surgery

By LAURA JOHANNES

When your sinuses are blocked, causing daily misery that medications can't seem to alleviate, an increasingly popular option is endoscopic sinus surgery. The effectiveness of the surgery—in which tissue and bone are removed to re-open nasal passages—has been mixed in scientific studies, but recent research shows it improves quality of life for many, scientists say.

Sinus surgery used to be done by cutting through the face, but today it is mostly done by sticking a thin flexible tube called an endoscope up the nostrils. Since endoscopes were introduced in the mid-1980s, sinus surgery has continued to improve as increasingly better equipment has allowed for more precise work, leaving as much healthy tissue as possible, says Oregon Health & Science University otolaryngologist Timothy Smith.



"Image guided" systems used in addition to endoscopes now allow doctors to see precisely where their instruments are during surgery on a video screen—useful in complex cases to help prevent injury to nearby eye and brain tissue, says Massachusetts Eye and Ear Infirmary surgeon Ralph Metson.

In a 130-patient study published online earlier this year, Dr. Smith and his colleagues found that patients who chose sinus surgery over continued medical management without surgery had a higher quality of life, fewer missed days of work and lower usage of steroids and antibiotics. "There has been nothing short of a revolution in our ability to treat the sinuses," Dr. Smith says.

Chronic sinusitis, or inflammation of sinuses that has lasted for at least three months, affects 15% of the U.S. population, says Dr. Smith, who has funding from the National Institutes of Health to study sinus surgery. Sinusitis symptoms include a stuffy nose, drainage from the nose, a feeling of pressure on the

face, headaches and a diminished sense of smell. While sometimes linked to allergies, sinusitis often occurs in people without allergies, Dr. Smith says.

It can often be treated effectively with medical therapy, including steroid sprays to reduce inflammation, antibiotics and irrigating with salt water. If all else fails, surgery is an option and is usually covered by insurance.

The goal of surgery is to restore drainage by removing inflamed tissue and enlarging the ostia, or small holes through which the sinuses drain, says Melissa A. Pynnonen, co-director of the Michigan Sinus Center at the University of Michigan in Ann Arbor. Before you get surgery, be sure your symptoms are caused by sinus problems, she adds. While sinusitis can cause headaches, severe headaches are likely to be migraines, which sinus surgery won't help.

In order for a patient to understand if surgery is worthwhile, "there needs to be a careful dialogue," says Dr. Pynnonen. "The patient has to clearly understand which symptoms are going to get better with surgery."

The utility of sinus surgery has been questioned by some researchers. A 2006 Cochrane review of endoscopic sinus surgery, last updated in 2009, found that endoscopic sinus surgery as performed in three studies the nonprofit organization reviewed "has not been demonstrated to confer additional benefit" over medical treatment.

But more recent research has found benefits to sinus surgery, though not in all patients. In a 2010 NIH-funded study of 302 patients, Dr. Smith and colleagues found patients on average showed a 21.2% improvement on a sinus-symptoms scale and a 15.8% improvement on a 30-question quality of life scale, which included questions on how sinusitis affected their work, personal and sex lives.

In the study, 72% to 76% of patients who had poor quality of life improved significantly after the surgery. The others may have improved, but didn't meet rigorous standards for clinical improvement, Dr. Smith says. The study didn't provide a comparison group who didn't have surgery.

Sinus surgery has been shown to help fatigue and muscle pains.

"A lot of times it's not the nasal symptoms that bother people most. It's the fatigue and flu-like symptoms," says Alexander C. Chester, an internist at Georgetown University Medical Center in Washington, D.C.

In a 2008 study published in the journal *Laryngoscope*, Dr. Chester and colleagues reviewed 28 sinus-surgery studies and found significant improvement in fatigue; another study found a reduction in body aches. The reasons why sinusitis can cause fatigue aren't known, but Dr. Chester believes it may be linked to an evolutionary mechanism in which it is safer for animals to stay still if noses are blocked and unable to detect predators.

Sinus surgery is fairly safe, but 4% of patients have nose bleeds so severe they must go to the doctor or emergency room and sometimes have surgery to stop the bleeding, Dr. Metson says. Risk of injuring the eye and brain are less than 1%, he adds.

Even if the surgery helps you, it won't necessarily free you from taking medication and irrigating your nose, doctors say.

If you have allergies, it won't cure them—just improve drainage. And years after surgery, your nasal passages can clog again and you may need a repeat operation.