

Endoscopic surgery effectively relieves sinusitis symptoms; large pooled study

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Endoscopic sinus surgery can significantly relieve symptoms of chronic rhinosinusitis - inflammation of the sinus cavities - according to a research team, led by a Georgetown physician, which conducted the first large-scale analysis of surgical outcomes from the procedure.

In the May issue of *Otolaryngology Head & Neck Surgery*, researchers found that symptoms usually associated with the [chronic condition](#), including nasal obstruction, facial pain, postnasal discharge, headaches, and impaired smell, all substantially improved after endoscopic sinus surgery.

"This kind of surgery is indeed beneficial to patients when standard medical treatment doesn't resolve the condition," says the study's lead investigator, Alexander C. Chester, MD, a physician and clinical professor at Georgetown University Medical Center. Two other physicians from St. Louis University School of Medicine collaborated in the study.

Endoscopic sinus surgery is an extremely common procedure - about 200,000 procedures are performed each year - yet this is the first meta-analysis of symptom relief following the surgery, Chester says. It was conducted by examining 21 different published studies, which included 2,070 patients, analyzing improvement for each symptom.

"Reports of relative symptom relief vary across studies, so it was important to pool the study results. We wanted to know not only if

symptoms improve overall, but if they improve to a similar degree, and if these benefits last," says Chester. "Our findings offer reassurance that, with minor exceptions, individual symptoms usually improve substantially and similarly following surgery."

Chester, an internist, says the study does not attempt to prove the effectiveness of endoscopic sinus surgery compared with medical treatment. "Only a randomized, controlled clinical trial testing surgery and medical therapy could prove that point."

But the findings will help patients weigh both the benefits and the risks of a surgical intervention, he says. "We now have the information we need to more accurately advise our patients," Chester says.

The type of surgery studied is typically done using endoscopic instruments, which allows surgeons to remove obstructions to drainage of the four sinus cavities. Older techniques are not so finely tuned to restoring natural function of the sinuses, Chester says.

The researchers assessed symptom relief using two different measures. The most precise is called "effect size" where any effect greater than .8 is considered a large effect. The researchers found that with a 1.73 effect size, nasal obstruction improved the most, followed by postnasal discharge (1.19), facial pain (1.13), headache relief (.98) and improvement in smell (.97). A second way of measuring symptoms, which is less accurate but more commonly used, compares the percent of improvement after surgery compared to before surgery. They found the following percentage improvements: 61 percent in facial pain, 59 percent in nasal obstruction, 53 percent in headache, 49 percent in smell, and 47 percent in postnasal discharge.

They also found that improvements do not decrease over time, as some smaller studies had suggested.

"We conclude that sinus surgery provides significant relief for most major sinus symptoms," Chester says.

Source: Georgetown University Medical Center ([news](#) : [web](#))

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