

A balloon that clears sinuses

HOW SINUPLASTY REDUCES PAIN AND BLEEDING AND SPEEDS RECOVERY

IF YOU'RE ONE OF THE 37 MILLION AMERICANS diagnosed with sinusitis each year, you know the intense discomfort it can bring. But balloon sinuplasty, a catheter-based surgical procedure offered at Monmouth Medical Center, has brightened the outlook for sinusitis sufferers.

"Balloon sinuplasty uses a catheter to open passageways between the nose and the sinuses," explains Vin Prabhat, M.D., an otolaryngologist—ear, nose and throat specialist—at the hospital. "It uses an inflatable balloon in a way similar to angioplasty, which opens blocked coronary arteries."

Sinusitis is an inflammation or structural blockage in the sinus cavities. These are hollow spaces connected to the nose that allow free exchange of air and mucus. "Sinuses help the nose warm, filter and humidify incoming air and let particles in the air be processed by the body's immune system," explains Dr. Prabhat. When these openings become swollen or blocked, normal mucus drainage stops, and infection or inflammation can result.

Sinusitis is responsible for an estimated 18 million to 22 million doctor visits every year in the U.S.

The first line of treatment is usually antibiotics with allergy medications to eliminate infection and/or steroid nasal sprays to reduce swelling, and for most patients they bring relief. "If repeated trials of medications don't resolve the problem, we do a CT [computed tomography] scan to assess the anatomy of the sinuses and their connection to the nose," says Dr. Prabhat. He also performs an office procedure called a nasal endoscopy, in which an endoscope—a long, flexible tube connected to a video camera—is inserted into the nasal passage to allow examination. If he finds that sinus passages are indeed blocked, it may be time for surgery.

Sinus operations once required surgeons to access the sinus cavities from the outside, through incisions in the gums or near the eyebrow. Then, in the 1980s, functional endoscopic sinus surgery (FESS) was

For a referral to a Monmouth Medical Center otolaryngologist, please call 1-888-724-7123.

developed, eliminating the need for external cuts. With this approach, surgeons can examine the sinuses and insert instruments through the nose to remove diseased bone and soft tissue, enlarging the openings. But FESS has drawbacks, including postoperative pain, swelling and bleeding.

Enter balloon sinuplasty. Available in this country since just December 2005, it's not a replacement for earlier surgical interventions, but a new method that minimizes tissue trauma. "Through the dilated opening created by the balloon, you can suction out fluid, remove a polyp or irrigate a sinus with antibiotics—whichever you need to do," says Dr. Prabhat. "The result is less bleeding, less pain, less swelling, less scar tissue and a quicker recovery."

Previously, sinus-surgery patients were out of work for as long as a week, with packing in the nose on both sides that made nasal breathing impossible. With balloon sinuplasty, packing is often unnecessary, and many patients return to work the next day.

There are four sinuses: frontal, in the lower forehead; ethmoid, alongside the upper part of the nose; sphenoid, deep behind the nose; and maxillary, in the cheeks. Balloon sinuplasty is less useful for ethmoid sinuses, the doctor says, because they're full of small aerated cells like a honeycomb. But it improves access to the frontal sinuses, which are behind the forehead at the roof of the nose, linked to the nose by a narrow tunnel.

With standard FESS techniques, poor visualization can make accuracy hard to achieve. When balloon



Vin Prabhat, M.D.

sinuplasty was introduced, that problem was solved by using X-ray guidance. Today Dr. Prabhat uses a catheter with a fiber-optic lighted tip.

"If you pass this catheter tip into the sinus and turn the lights down in the operating room, you can see a light shining from inside the sinus—just as a lighted flashlight is visible inside a tent," says the doctor. "That confirms that we've catheterized the correct sinus."

When the catheter is in position, the surgeon extends it with a 3- to 7-millimeter balloon into the sinus opening. The balloon is then dilated, expanding the natural opening in the sinus passage.

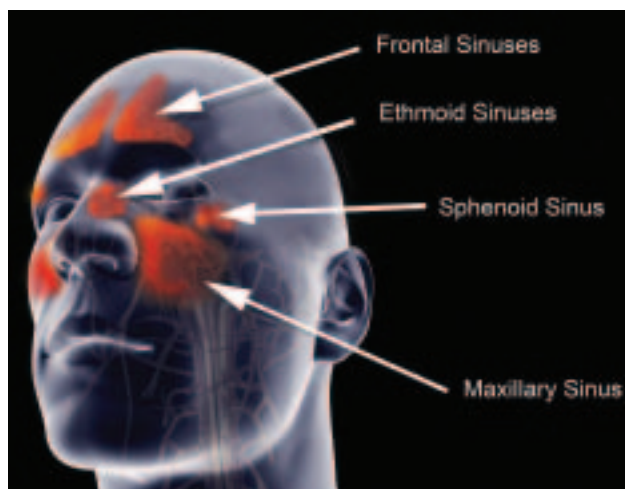
In many cases balloon sinuplasty makes unnecessary the repeat or "revision" surgeries that would have been required with earlier methods. And it can be done safely in children; they're often considered ineligible for surgery because of scarring and possible complications, but these are less likely with the newer technique.

Balloon sinuplasty is not for everyone. People with severe scarring from previous surgery, for example, are not usually candidates. "But it's very effective for people whose chronic sinus issues have been unresponsive to medical and allergic therapy and who have not previously had sinus surgery," says the doctor.

Patient satisfaction with the procedure has been very good, he says. And interest is huge, especially from people who have been hesitant about surgery because of pain.

"Balloon sinuplasty is fast becoming state-of-the-art," says Dr. Prabhat. ▢

SIGNS OF SINUSITIS



Take the quick symptom census below. Checking three or more boxes means you may have sinusitis, and it's worth checking with your doctor to find out for sure.

- facial pressure or pain
- headache pain
- nasal congestion or a stuffy nose
- thick, yellow-green nasal discharge
- low fever (99–100 degrees)
- bad breath
- pain in the upper teeth

Source: American Academy of Otolaryngology—Head and Neck Surgery