



The balloon that clears blocked sinuses

A new procedure means less pain and a quicker recovery

If you're one of the 37 million Americans diagnosed with sinusitis each year, you know the intense pain and feeling of pressure it can bring. Chronic sinusitis causes an estimated 18 million to 22 million doctor visits per year. And it costs Americans about \$5.8 billion annually. But thanks to balloon sinuplasty, a new catheter-based technology being pioneered at Monmouth Medical Center and a few other hospitals, the outlook for sinusitis sufferers just got brighter.

The condition is caused by an infection or structural blockage of the sinus cavities in the face. These are hollow air spaces that are connected to the nose, allowing for free exchange of air and mucus. When the openings become swollen or blocked, normal mucus drainage stops, and infection or inflammation can result.

The first line of treatment is usually antibiotics to eliminate infection and steroid nasal sprays to reduce swelling. When medications alone fail to resolve the problem, patients often turn to surgery for relief.

In traditional sinus operations, surgeons would 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 developed, eliminating the need for external cuts. It employed an endoscope—a long, flexible tool inserted through the nose. With this approach, surgeons can examine the sinuses and insert instruments such as microshavers to remove diseased bone and soft tissue, thus enlarging the openings and restoring normal function.

FESS can be performed with CT (computed tomography) scan guidance for additional safety. But it can have drawbacks, including postoperative pain, swelling and bleeding that can require nasal packing (material inserted in the nose to apply light pressure). That is where balloon sinuplasty comes in.

"It's a very clever use of balloon angioplasty-type techniques to open up sinuses in a less traumatic way," says Vin Prabhat, M.D., an ear, nose and throat specialist at Monmouth.

Available in this country just since December 2005, the new technique means shorter recovery times, less pain and less bleeding. "It makes our work



For more information on the treatment of sinus problems, please call Central Jersey Otolaryngology at 732-389-3388.



A new procedure called balloon sinuplasty may offer relief from sinusitis, says ear, nose and throat specialist Vin Prabhat, M.D.

more accurate with one sinus in particular—the frontal sinus,” says Dr. Prabhat. “It’s difficult to make sure the frontal sinuses are opened adequately because they have a very long entrance.”

Accuracy can be hard to achieve because of poor visualization, often made worse by the blood that results from scraping or cutting in conventional surgery. And the frontal sinuses are close to the brain, which can mean a greater risk of injury.

To solve this problem, balloon sinuplasty utilizes fluoroscopic imaging, in which a continuous X-ray beam is used to view an organ or part of the body in real time, with the images shown on a monitor. A small, flexible guide wire is inserted into the sinuses. The wire, covered with a 3- to 7-millimeter balloon, is positioned across the blocked sinus opening. On the tip of the balloon is a small device that is detected by the X-ray, confirming the positioning. The balloon is then gently inflated, fracturing the tiny bones in the opening and spreading them apart without cutting and scraping.

The technique is not

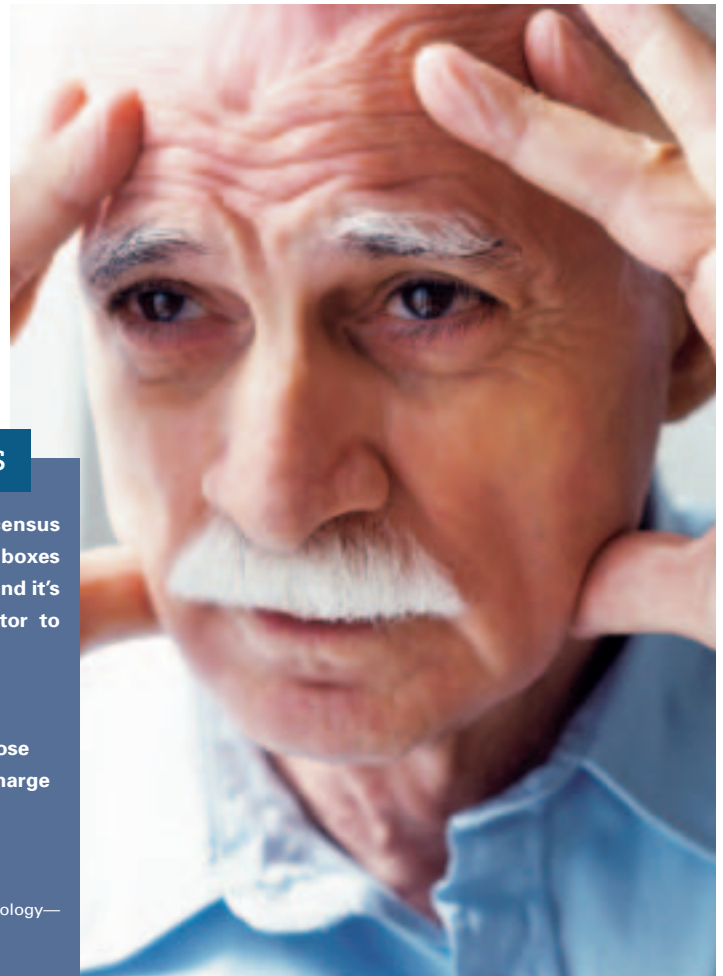
suitable for everyone. People with nasal polyps and those with severe scarring or abnormal bone growth following previous surgery are not candidates.

Also, says Dr. Prabhat, the technique is better suited to some surgeries than others. For example, it’s not necessary for treating the maxillary sinuses (in the cheekbones), as they have very thin bones and do not tend to bleed a lot. But for the sphenoid sinuses (behind the nose and eyes) and especially the frontal ones, he says it’s a great help.

Patient satisfaction with the new procedure has been good, he says. And interest has been huge, particularly from patients who have been on the fence about sinus surgery due to its reputation for causing pain.

At presstime, Dr. Prabhat was one of only four doctors in New Jersey performing the procedure.

“It’s getting out there in the media, and people are calling to ask about it,” he says. ■



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 F)
- bad breath
- pain in the upper teeth

Source: American Academy of Otolaryngology—Head and Neck Surgery