Dr. Louis Petcu is currently the only otolaryngologist in the Pioneer Valley offering this new surgical treatment for chronic sinusitis.

Sinuplasty:

A Tool to Relieve Sinus Pressure and Pain

By Patricia Sullivan

Patients now have the option of sinuplasty, a less-invasive procedure offered at Baystate Medical Center for the treatment of chronic sinus disease.

Sinus disease is one of the most common health problems in our country today. It affects an estimated 37 million Americans and accounts for $8.1 billion in annual health care expenditures. It is more common than high blood pressure or arthritis.

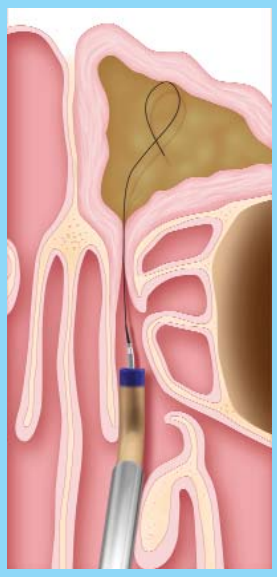
Sinusitis, an infection involving one or more sinuses, can be caused by several factors: infectious (viral, bacterial or fungal), anatomic (polyp, septal deflection, abnormal nasal anatomy) or inflammatory (smoke, allergens, pollution, chemicals). When the sinus opening becomes blocked, the sinus fills with mucus and an infection begins.

Although 75 percent of patients respond favorably to proper administration of antibiotics, nasal and systemic steroid sprays, and allergy diagnosis and treatment, some progress to chronic sinusitis. With this painful condition, mucosal changes that resist medical treatment are present; these patients are potential candidates for surgical treatment.

Sinuplasty

Prior to the 1980s, sinus surgery often involved facial or oral incisions. The advent of functional endoscopic sinus surgery (FESS) in the mid 1980s offered a minimally invasive technique that allowed for the surgical excision of limited amounts of tissue around the openings of the sinuses. However, patients required general anesthesia, experienced post-operative bleeding requiring nasal packing, and were subject to debridement in the post-operative period.

Further refinements in surgical instrumentation led to sinuplasty, approved by the FDA in 2005 for the treatment of chronic sinus disease. Since July, select patients with sinus disease at Baystate Medical Center have the option of Balloon Sinuplasty™. Inspired by balloon angioplasty, this technique uses a small balloon to force an opening in the sinus. Louis Petcu, MD, FACS, is currently the only otolaryngologist in the Pioneer Valley offering this new surgical treatment for chronic sinusitis.



1. The surgeon inserts a guide wire (either optically or fluoroscopically guided) and a balloon catheter into the sinus.

2. The balloon is inflated to move occluding bone and mucosa and widen the sinus opening.

3. After removing the balloon catheter, the surgeon may insert an irrigating catheter to irrigate the sinus cavity.

The Procedure

Balloon Sinuplasty™ is performed in select cases using local anesthesia. The surgeon inserts a guide wire (either optically or fluoroscopically guided) and a balloon catheter into the sinus, and inflates the balloon to move occluding bone and mucosa and widen the sinus opening. After removing the balloon catheter, the surgeon may insert an irrigating catheter to irrigate the sinus cavity.

Because sinuplasty does not require cutting and removal of tissue, it has distinct advantages over functional endoscopic sinus surgery, says Dr. Petcu. These include:

- Greater intraoperative safety;
- Almost no intra-or postoperative bleeding;
- No nasal packing;
- Less postoperative pain;
- More rapid return to work and daily activities (typically within 24 hours, as opposed to five to seven days for FESS);
- No need for office debridement procedures; and
- Retention of normal mucosal function.

Sinuplasty is not appropriate for patients with unusual sinus anatomy, extensive nasal polyps, or chronic sinusitis limited to the ethmoid sinuses. Therefore, certain patients with multiple sinus disease may require a hybrid surgical procedure, with some sinuses treated with sinuplasty and others with FESS.

"This is a more advanced, less invasive technique with better tolerated surgical outcomes."

Impressive Results

According to Dr. Petcu, "This is a more advanced, less invasive technique with better tolerated surgical outcomes. Before incorporating this procedure into my practice, I waited for the results of studies of hundreds of patients that showed that the procedure was effective and safe, without major complications in any patient" (Otolaryngology–Head and Neck Surgery (2008), 139, S23-S26).

He adds that to-date, "There are three reports of major complications in 85,000 sinuses treated, a complication rate of 0.0035 percent. It's remarkable."

Dr. Petcu expects that the advent of sinuplasty will convince more chronic sinusitis patients to opt for surgical treatment. "Perhaps half of my sinus patients

choose to continue to suffer from chronic sinusitis because they don't want painful surgery. But it's one thing to tell patients you are going to cut away some of their bone and mucosa, and another to tell them you are going to inflate a small balloon in their sinus," he says. "More people are willing to consider this new procedure."

Results from Dr. Petcu's first sinuplasties have been gratifying. In two-week postoperative surveys, every one of his patients reported significant improvement. "Before this technique, I never would have anticipated that some sinus surgery patients could be back at work in a day or two," he says. "I was also very surprised when my first sinuplasty patients told me they didn't need any postoperative prescription pain medication."

Dr. Petcu stresses that although chronic sinusitis is surgically treatable, "Surgery does not remove the inciting causes. Patients must learn to practice preventative medicine to keep the problem from recurring."

Inspired by balloon angioplasty, this technique uses a small balloon to force an opening in the sinus.

For more information, **about this procedure, or to refer a patient, call Dr. Louis Petcu at 413-538-8899.**

No More Headaches for this Chronic Sinusitis Sufferer

Evelyn Tosses, 49, began to suffer from sinus problems in elementary school. She has multiple allergies, including to pollen and many foods. Her frequent headaches sometimes lasted as long as a month. Her chronic sinusitis did not improve with medical intervention, including antibiotics and steroids.

Dr. Louis Petcu confirmed her sinus obstructions with a CT scan and determined that she was a good candidate for balloon sinus surgery to clear her frontal sinuses. Ms. Tosses was delighted with the outcome and says that her sinuses were vastly improved one week after the procedure and she had only minor postoperative discomfort.

"I'm so happy," she says. "I have no more headaches. I feel much, much better." In addition, congested sinuses no longer weaken her voice. As a teacher of special needs children in Holyoke, her voice is vital. "For the first time this September, I could speak loudly when I went back to school," she says. "I feel perfect."

Ms. Tosses is determined to keep her sinuses clear and to avoid the headaches that plagued her for decades. She continues to see Dr. Petcu for allergy treatment.