

Dublin Methodist Hospital tackles sinus disease with advanced interventions

Dublin Methodist Hospital has the expertise and resources to offer the latest minimally invasive techniques for the treatment of chronic sinusitis, an inflammation of the sinus linings caused by infection or structural abnormalities.

The hospital replaces open surgery with two state-of-the-art procedures: Computer guided Functional Endoscopic Sinus Surgery (FESS) and its more recent and even less traumatic derivative, Balloon Sinuplasty.

“Quality of life criteria show that chronic sinusitis is just as debilitating as diabetes or congestive heart failure.”

“It’s unusual to have this kind of advanced sinus disease treatment in a community hospital,” said fellowship-trained sinus surgeon Boris Karanfilov, MD, of the Ohio Sinus Institute in Dublin.

Each of the minimally invasive procedures inserts an endoscope into the nose to examine the sinus openings and aid in their enlargement. Computer-guided assistance and trans illumination systems ensure the precise placement of instruments and eliminate the need for X-ray imaging and its radiation exposure. FESS removes bone and/or diseased tissue to widen the nasal passages, restoring drainage and ventilation.

The surgery has been practiced since the 1980s, but new surgical tools spare damage to healthy sinus lining and avoid the grabbing and tearing of tissue.

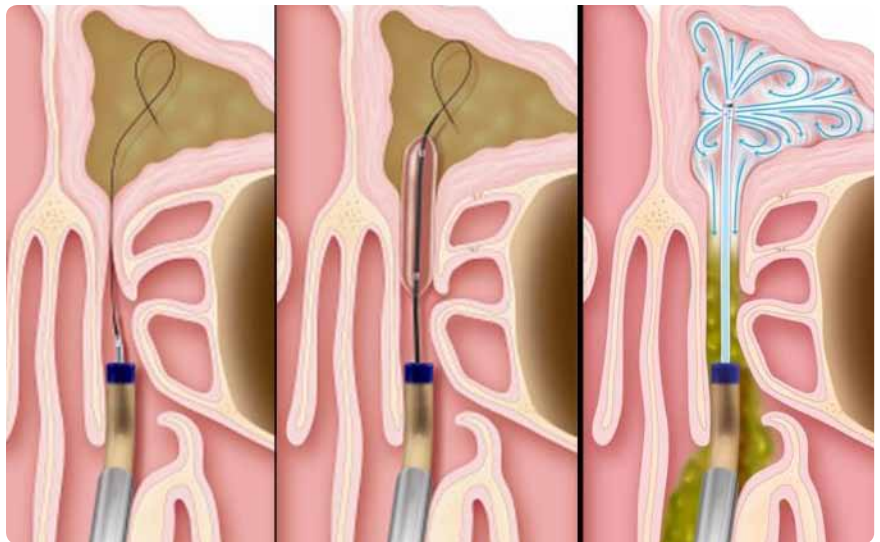
Balloon Sinuplasty opens the nasal cavities the same way physicians open clogged arteries when they do a balloon angioplasty. Doctors thread a tiny balloon over a guided wire into the affected sinuses, inflate the balloon to open the blockage, then deflate and withdraw the balloon.

The process often provides permanent relief because “it fractures the thin bones of the sinus lining that heal in a wider position to keep the passageways

open,” Karanfilov said. “It acts as a self-stenting mechanism.”

Karanfilov and colleague Akash Gupta, MD, have adapted Balloon Sinuplasty for routine use at Dublin Methodist. The procedure received FDA approval in late 2004 and Karanfilov performed Ohio’s first balloon-assisted sinus surgery in May of 2005. He was one of only ten physicians who participated in the first national trial comparing its safety and efficacy to FESS.

“With an 85 percent success rate in maintaining patency, it’s just as effective as FESS in properly selected patients and extremely safe with less bleeding and scarring,” Karanfilov said. “I’ve had



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 Boris Karanfilov, MD, performs Balloon Sinusplasty to open blockages in the nasal cavity.

balloon patients miss one or two days of work, while some of my FESS patients have missed up to ten days.”

Karanfilov currently is participating in a national study evaluating balloon-assisted sinus surgery under local anesthesia in the office setting instead of under general anesthesia in the operating room. “If we can do this in the office, similar to the way dental procedures are performed, we can cut healthcare costs and enhance patient convenience,” he said.

Between 20 and 50 percent of chronic sinusitis patients are candidates for the balloon-assisted treatment, Karanfilov said. Patients whose blockages are caused by polyps, massive fungal infections, deviated septa, or ethmoid disease typically require the more traditional FESS.

Karanfilov emphasized that any sinus surgery should be considered only after medical therapies, such as antibiotics and corticosteroids, have failed.

Thirty-seven million Americans have some degree of chronic sinusitis that annually accounts for \$900 million in prescription medication costs.

“Quality of life criteria show that chronic sinusitis is just as debilitating as diabetes or congestive heart failure,” Karanfilov said. “People have congestion and breathing difficulties. They can’t sleep, are tired all the time, have trouble concentrating and miss work. A chronic infection in the nose affects the entire body.” ■