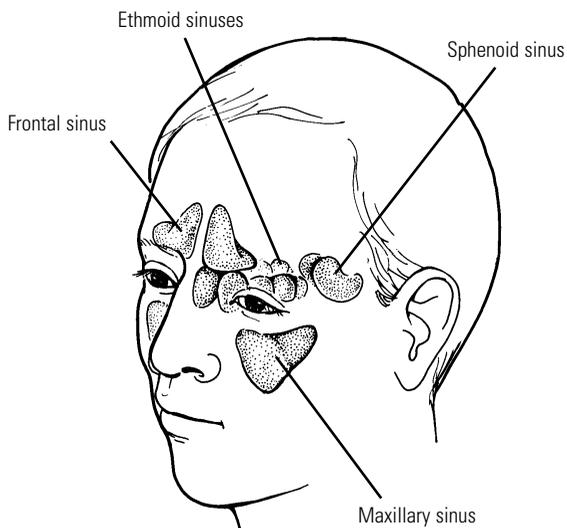


A Patients Guide To Image Guided Sinus Surgery

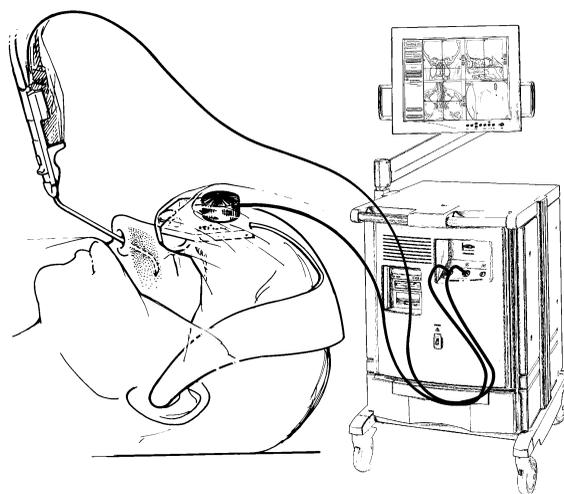
Why Your Surgeon Has Chosen The InstaTrak® or ENTrak™ System For Your Sinus Surgery

The InstaTrak® and ENTrak™ System from GE Medical Systems integrates CT and MR scans with a sophisticated guidance system. Highly accurate visual updates will guide your surgeon at every step of the procedure, without dependence on limited visual ability — and no longer restricted by the endoscope's telescopic view. Your surgeon will be able to see the surrounding anatomy and the instruments as the procedure is being performed. Your surgeon will explain the procedure to you. If you have any questions about the surgery or the use of the InstaTrak or ENTrak System during surgery, ask your surgeon.



How Electromagnetic Image Guided Surgery Systems Work

The InstaTrak and ENTrak Systems use a computer, specialized software and an electromagnetic tracking system to help your surgeon perform procedures as precisely as possible. The System software builds a computerized model of your skull anatomy with CT scans taken prior to your surgery. This model will act as a three dimensional road map for your surgeon. The tracking system links the surgical instruments that will be used during the procedure to the computer. The instruments will appear on the computer display screen as a set of cross hairs which move through the computerized model of your skull. This will allow your surgeon to see the exact location of the surgical instruments in direct relation to areas of your skull anatomy that cannot be seen through the endoscope.



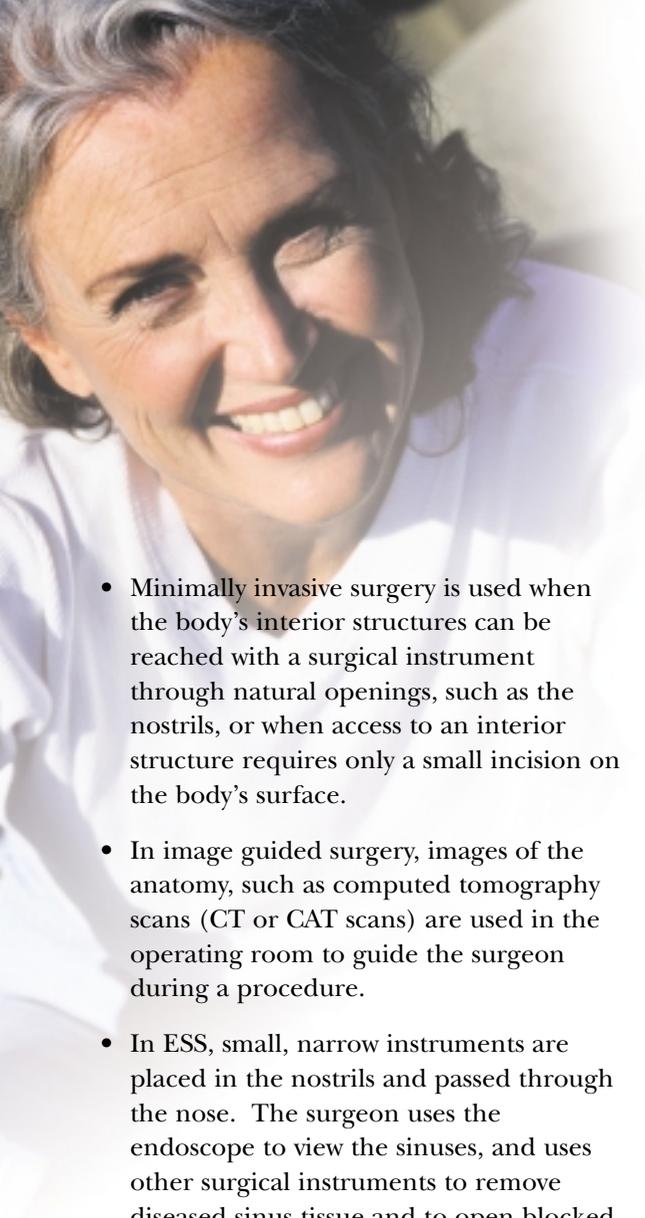
Date & Time of CT Scan

Date & Time of Surgery

Hospital Name

Surgeon Name

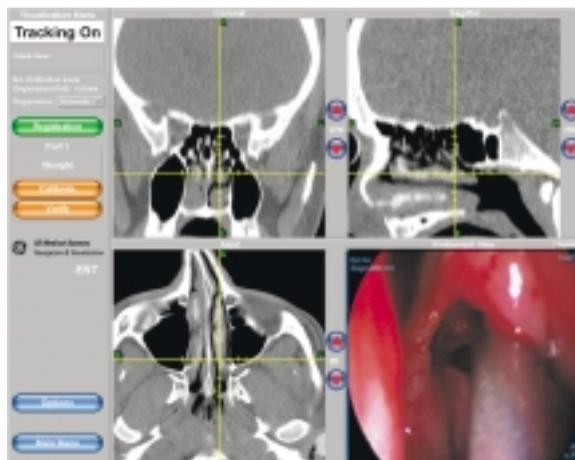
Surgeon's Office Information



About The InstaTrak System For Endoscopic Sinus Surgery

Your surgeon has chosen to use either the InstaTrak or ENTrak Surgical Navigation System for your sinus procedure. This brochure will describe the System, and familiarize you with some of the medical terms that you may encounter in the course of your treatment. The InstaTrak and ENTrak Systems are three-dimensional guidance systems used in minimally invasive image guided surgery. When used to repair the sinuses, this kind of surgery is referred to as endoscopic sinus surgery, or ESS.

- Minimally invasive surgery is used when the body's interior structures can be reached with a surgical instrument through natural openings, such as the nostrils, or when access to an interior structure requires only a small incision on the body's surface.
- In image guided surgery, images of the anatomy, such as computed tomography scans (CT or CAT scans) are used in the operating room to guide the surgeon during a procedure.
- In ESS, small, narrow instruments are placed in the nostrils and passed through the nose. The surgeon uses the endoscope to view the sinuses, and uses other surgical instruments to remove diseased sinus tissue and to open blocked breathing passages.



The endoscope acts like a miniature telescope to clearly illuminate the surgeon's view of the sinuses. Like a telescope, the endoscope provides a detailed close-up view of the immediate surface area, but does not allow the surgeon to see around corners, or to locate surgical instruments in relation to the surrounding anatomy.

Although ESS is one of the most popular methods used today to correct sinus problems, until recently, surgeons performing ESS depended only on their skills, information provided by the Radiology Department, and what could be seen through the endoscope.

Preparing For Your Surgery *The Radiology Department*

Before going to the operating room, you will visit the Radiology Department. While in Radiology, please follow the instructions of the staff. Their instructions are crucial to gathering important information that your surgeon will use during your procedure.

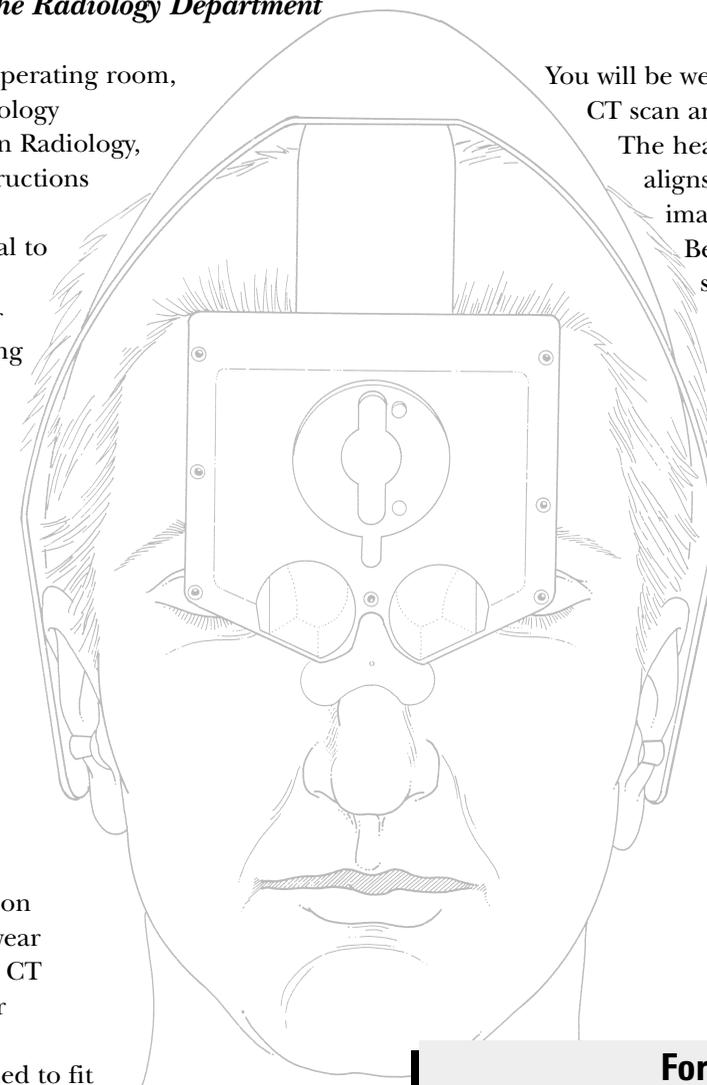
In Radiology, you will be asked to remove all metal objects that you may be wearing on your head, such as jewelry or eyeglasses. You may wish to remove these items before going to Radiology.

A technologist will place the Automatic Registration Headset on your head. You will wear the headset while the CT scans needed for your surgery are taken. The headset is designed to fit snugly on your head and across the bridge of your nose, and has ear pieces that rest in your ear canal.

When your scans are complete, they will be stored in the InstaTrak or ENTrak System computer. At the time of your surgery, the scans and the headset will be brought to the operating room.

The Operating Room

You will be wearing a headset for your CT scan and during your surgery. The headset automatically aligns your computerized CT images with your anatomy. Before surgery begins, the surgical staff will reposition the headset on your head, and they will remove it when your surgery is complete.



For More Information

Your surgeon will be happy to answer any questions you may have about your condition, treatment options, the surgical procedure, recovery and after care. The information contained in this brochure has been provided to your doctor, by GE Medical Systems as a service to surgeons using the System, and their patients. It is not intended to provide or recommend medical advice of any kind.