Nasal Sinus Endoscopy

What are they really doing in there?
So What’s Up Your Nose?

The nose contains three major structures which are key to ordinary breathing. They are:

1. Nasal sinuses
2. Nasal turbinates
3. Nasal septum
What Sinuses Are

Sinuses are air-filled cavities in the skull, around the nose.

On each side of the face, there are four sets of sinuses:

- Frontal – above the eyes
- Maxillary – in the cheek bones
- Ethmoid* – behind the nasal bridge
- Sphenoid – deep behind the eyes

All sinuses are connected to the inside of the nose through an opening called an **ostium**.
Understanding FESS

The basic concepts of endoscopic sinus surgery are fairly straightforward. However, to follow the complex steps of the procedure, in-depth understanding of nasal sinus anatomy is essential.
Basic Coding Rules for FESS

- Use multiple codes for multiple sinuses
- FESS codes are all unilateral
- **Don’t** code a diagnostic endoscopy with surgical
- **Don’t** code removal of the uncinate process separately
- **Don’t** routinely code turbinectomy separately
- **Do** code turbinectomy separately when there’s pathology
- **Do** code septoplasty separately
Surgical Navigation

Some nasal sinus endoscopies use computer-assisted navigation.

A special headset is placed on the patient’s head. This relays data to a computer builds a 3-D model the surgeon uses to map out the anatomy in advance. The computer also produces 3-D images of the procedure in progress, essentially allowing the surgeon to see around corners.

Computer-assisted navigation is most common in patients whose anatomy has been altered, either by severe disease or by previous sinus procedures.
Non-Endoscopic Sinus Surgery: Frontal Sinus Trephination

In addition to FESS, the frontal sinus can also be accessed by simple frontal trephination.

An incision is made under the brow and a hole is drilled into the frontal sinus. An external drain is then placed through the hole for irrigation and sinus drainage.
Case Example 1

The patient was prepped and draped for endoscopic sinus surgery. The patient’s right nasal cavity was injected with 1% lidocaine with epinephrine. Under 0 degree endoscopic visualization, a sickle knife was used to make an uncinectomy and the middle turbinate was medialized. Straight and upbiting forceps were used to take down the bulla and anterior ethmoid cells. A 30 degree endoscope was then used to open up the maxillary sinus widely using backbiting forceps and a straight Allen. The nasal cavity was suctioned clear of blood. Bactroban-coated sponge was placed in the dissected ethmoid air cells and secured to the side of the face with steristrips. The patient left the OR in satisfactory condition.

Codes: