Endoscopic Surgery Brings Relief to Sinus Patients

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Millions of people are afflicted with chronic sinusitis annually. Most patients can be effectively treated with antibiotics, but for those who cannot, surgery is often recommended.

Endoscopic sinus surgery (ESS) is one of the fastest growing procedures performed in the field of otolaryngology. ESS was introduced in the 1960s but did not become widely used in the US until the 1980s.

Before ESS was introduced, conventional external and intranasal procedures were performed. ESS has increased in popularity because of enhanced intraoperative visualization and reduced postoperative recovery time. Also, the flexibility of the endoscope has expanded its application to a variety of sinus conditions. This article will review endoscopic sinus surgery and the implications for CPT coding.

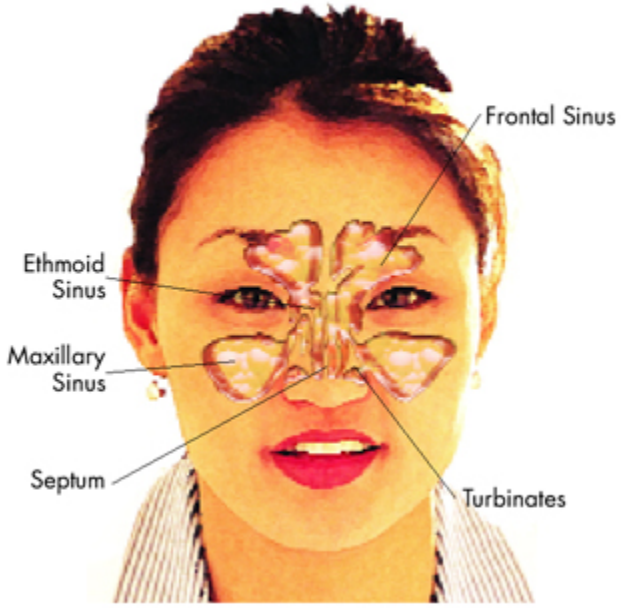
How the Sinus Functions

The paranasal sinuses secrete mucous to assist with air filtration. Special cells called mucosa line the sinuses. Mucous helps trap dirt from the air we breathe. The dirt is then expelled to the outside using small hair-like attachments called cilia. The sinuses are connected to the nasal cavity through small openings. If these openings become blocked, an obstruction of mucous flow occurs, resulting in infection. This infection is usually associated with marked thickening of the mucous membrane lining.

Anatomy of the Sinus

Four separate sinuses are located on each side of the face. The frontal, located above each eye, the maxillary or antral, located below each eye, the sphenoid, located behind the nasal cavity, and the ethmoid, located between the eye and the nose. The maxillary sinus is also called the maxillary antrum or just antrum.

The concha bulla is an extension of the ethmoid sinus located in the middle turbinate. When a concha bulla resection is done, the physician is actually removing the middle turbinate. Three nasal turbinates assist the drainage of fluid from the sinuses. These are the inferior, middle, and superior turbinates. All four paranasal sinuses have an opening or ostium. When the ostium of a sinus becomes blocked, obstruction of mucous flow occurs, resulting in stagnation and infection.



Endoscopic Sinus Surgery

ESS is a procedure used to remove blockages in the sinuses. These blockages cause sinusitis, which causes the sinuses to swell. The sinuses also become clogged, causing pain and impaired breathing.

Surgery on the sinuses can be performed through an incision on the face or forehead. It can also be performed through a thin, lighted instrument called an endoscope that is inserted into the nose. The physician looks inside through an eyepiece. Much like a telescope with a wide-angle camera lens, the endoscope beams light into different parts of the nose and sinuses, allowing the physician to see what is causing blockages. Surgical instruments can then be used along with the endoscope to remove blockages and improve breathing.

This surgery method, which is performed entirely through the nostrils, allows most patients to go home the same day. The advantages of sinus surgery include:

- Local versus general anesthesia
- Outpatient procedure versus inpatient (required hospital stay)
- Ability to reach areas that previously could not be visualized
- Less trauma to the surrounding tissue

Types of Procedures

When the endoscope is passed through the interior nose and openings to the paranasal sinuses and the surgical instrument is passed beside the endoscope, the procedure is termed endoscopic. When surgical instruments are introduced through the interior nose and into the paranasal sinuses, the procedure is called intranasal. A surgical sinus endoscopy includes a sinusotomy (when appropriate) and a diagnostic endoscopy.

CPT codes 31231-31294 are used to report unilateral procedures unless otherwise specified. If one of the procedures listed in this range is performed bilaterally, and the code does not specify bilateral procedure, the modifier -50 would be appended to the appropriate code.

The codes 31231-31235 for diagnostic evaluation refer to employing a nasal/sinus endoscope to inspect the interior of the nasal cavity, the middle and superior meatus, the turbinates, and the sphenoethmoid recess. Any time a diagnostic evaluation is performed, all these areas are inspected. A separate code is not reported for each area.

Operative Endoscopy Codes

Code 31237-Surgical endoscopy with biopsy, polypectomy, or debridement
The endoscope is inserted into the nasal cavity to do a biopsy on tissue or structural defect. Polypectomy for polyps or debridement to clean out the sinuses, including the middle turbinates, are performed. This is a separate procedure, usually part of another larger procedure.

Code 31238-Surgical endoscopy with control of epistaxis
The endoscope is inserted into the nasal cavity and cauterization is done alongside the endoscope to stop the bleeding.

Code 31239-Surgical endoscopy with dacryocystorhinostomy
The endoscope is inserted into the nasal cavity and a surgical opening is made between the lacrimal sac and the nasal cavity to allow drainage. This procedure is done when there is blockage of the tear ducts.

Code 31240-Surgical endoscopy with concha bulla resection
The endoscope is inserted into the nasal cavity, and the middle turbinate, which houses the enlarged concha bulla (a cystic distention), is removed with biting and cutting instruments. The enlarged concha bulla causes swelling and stretching of the turbinate bone.

Code 31254-Anterior (partial) ethmoidectomy
The endoscope is inserted into the anterior portion of the ethmoid sinus to remove tissue. This includes the middle turbinate.

Code 31255-Anterior and posterior (total) ethmoidectomy
The endoscope is inserted into the anterior and posterior portion of the ethmoid sinus to remove tissue. This includes the middle turbinate.

Code 31256-Surgical endoscopy with maxillary antrostomy
The endoscope is inserted into the nose and an opening is made in the maxillary sinus for drainage, or the natural opening or ostium is enlarged to allow drainage.

Code 31267-Surgical endoscopy with maxillary antrostomy with removal of tissue from maxillary sinus
The endoscope is inserted into the nose and a maxillary antrostomy is done along with a removal of tissue from the maxillary sinus.

Code 31276-Surgical endoscopy with frontal sinus exploration with or without removal of tissue from the frontal sinus
The endoscope is inserted into the nose, and the entry into the frontal sinus is via a puncture. This procedure is often done under fluoroscopic guidance. The bone between the sinus and the brain is very thin. It is not uncommon for an antrostomy to be performed to create an opening for drainage from the maxillary sinus during this procedure.

Code 31287-Surgical endoscopy with sphenoidotomy
The endoscope is inserted into the nose via the middle turbinate, into the sphenoid sinus. The opening into the sphenoid sinus is enlarged for drainage. The middle turbinate may be fractured or removed for access (this is not coded separately).

Code 31288-Surgical endoscopy with sphenoidotomy with removal of tissue from the sphenoid sinus
The endoscope is inserted into the nose via the middle turbinate, into the sphenoid sinus. Sphenoidotomy is done along with removal of tissue from the sphenoid sinus.

In support of AHIMA activities encouraging the adoption of ICD-10-CM and ICD-10-PCS, “Coding Notes” articles will now contain ICD-10-CM and ICD-10-PCS codes as appropriate.

ICD-10-PCS is based on a multi-axial coding system in which codes are “built” to report a specific procedure, rather than having preformatted codes, as is the case with ICD-9-CM Volume III. The ICD-10-PCS codes and training manual can be downloaded from the CMS Web site at http://cms.hhs.gov/providers/pufdownload/icd10.asp.

The code for a percutaneous endoscopic right maxillary antrostomy with removal of tissue (CPT 31267-RT) in ICD-10-PCS would be **099Q4ZZ**.

- The first digit, 0, indicates that this code comes from the medical/surgical section of ICD-10-PCS.
- The second digit, 9, identifies the ear, nose, and sinus chapter.
- The third digit, 9, identifies the root operation, in this case, drainage.
- The fourth digit, Q, identifies the right maxillary sinus.
- The fifth digit, 4, identifies the approach, percutaneous endoscopic.
- The sixth digit, Z, indicates the absence of any type of device, such as implant.
- The seventh digit, Z, indicates that this was not a diagnostic or endolymphatic procedure.

If a left endoscopic anterior and posterior ethmoidectomy were performed in addition to the maxillary surgery, code **099W4ZZ** would be reported. The fourth digit alone would change, becoming W (left ethmoid sinus) instead of Q (right maxillary sinus).

References

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