# Endoscopic View of Intranasal Sphenoethmoidectomy and Maxillary Sinusotomy Pre-FESS

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Figure 1. Computed tomography scan shows loss of anatomical landmarks in the left nasal airway.

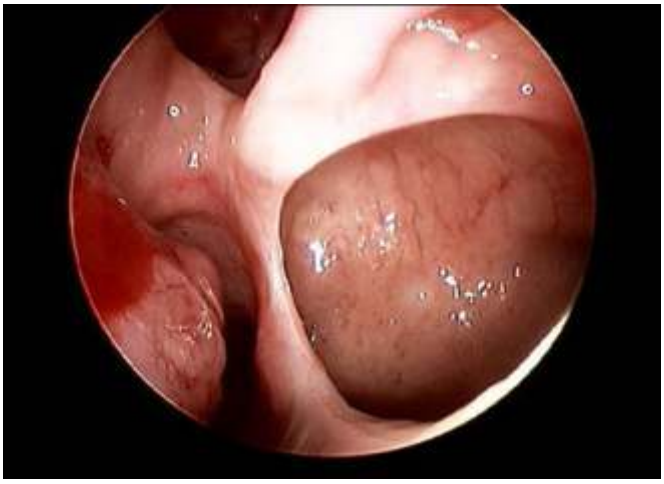

Figure 2. A large medial maxillary antrostomy is seen in the left nasal airway. The inferior turbinate is absent.

A 73-year-old male was referred for sinus evaluation because of occipital headaches. He had no other sinus symptoms other than feeling intermittent left nasal obstruction. The patient had a history of undergoing extensive sinus surgery 47 years previously in Europe.

Computed tomography sinus evaluation showed loss of anatomical landmarks on the left side (Figure 1). Clinical endoscopic examination revealed a normal right airway and nasopharynx. Endoscopic examination of the left airway revealed extreme loss of anatomical landmarks including previous removal of the left nasal turbinates (Figures 2–4).

Methodical endoscopic examination revealed a large antrostomy in the medial wall of the left maxillary sinus with healthy mucosa (Figure 2). There were no signs of infection or growths in

the left maxillary sinus. The left middle turbinate had been removed and total ethmoidectomy had been carried out leaving only the left ethmoid roof superiorly and the lamina papyracea laterally (Figure 3). All ethmoid cells and the floor of the ethmoid labyrinth had been removed.

The left sphenoid sinus had been opened by removing its anterior wall from a nasal approach and a posterior ethmoid approach. This resulted in a widely exteriorized sphenoid sinus (Figure 4). No acute disease was found in the sphenoid sinus.

Prior to the introduction of functional endoscopic sinus surgery, coined by Kennedy,[1] also defined by Stammberger,[2] and Wolf in the 1980s, this type of sinus procedure, that is intranasal sinus surgery, was the alternative to external approaches. There was controversy regarding both the approach and the extent of surgery required. These more extensive procedures carried significant risk to the patient[3] and it was not clear how much was needed to improve outcomes.

The instrumentation available were headlights, curettes, and grasping or biting forceps. Most important to the rhinologic surgeon were good visualization and extensive knowledge of the intranasal anatomy.

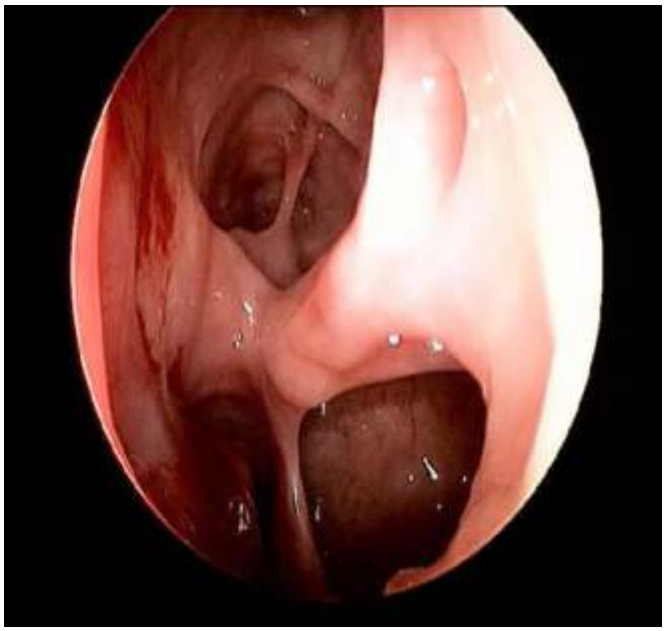

Figure 3. This image shows a totally resected ethmoid labyrinth, a middle meatal maxillary antrostomy, and sphenoid sinusotomy. The middle and superior turbinates have been removed.

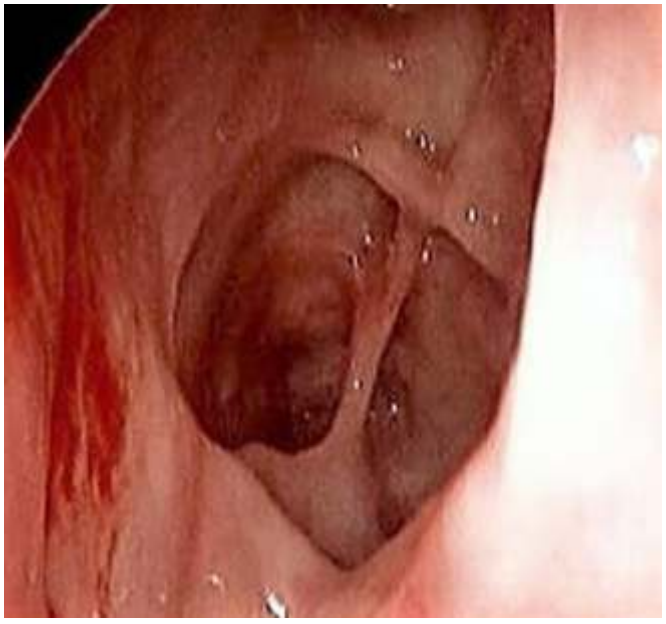

Figure 4. An exteriorized sphenoid sinus seen after removal of the anterior face of the sphenoid sinus.

The development of FESS and use of endoscopy has made significant impact emphasizing attention to reestablishing sinus drainage and more specifically addressing areas of sinus disease.

Acknowledgment

The authors thank Grayson Bertaina for his assistance in preparing this article.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and /or publication of this article.

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Credits: Christmas, D. A., Mirante, J. P., & Yanagisawa, E. (2019). Endoscopic View of Intranasal Sphenoethmoidectomy and Maxillary Sinusotomy Pre-FESS. Ear, Nose & Throat Journal, 98 (7), 398–399. https://doi.org/10.1177/0145561319857901