

OUTREACH

PHYSICAL AND OCCUPATIONAL THERAPY AND SPEECH REHABILITATION, PLLC

Outreach now offers Fiberoptic Endoscopic Evaluation of Swallowing (FEES) to all of our patients, both at our clinic and in patients' homes within Manhattan, Brooklyn, and Queens!

Meet Our Endoscopist



Meghan Ahern, MS CCC-SLP is a Speech-Language Pathologist with experience across acute, subacute, and home care, and has served as the SLP supervisor for Outreach since 2016.

She was trained in FEES by the top certified endoscopy trainers in the country.

She also currently teaches graduate-level courses in Swallowing and Swallowing Disorders at Long Island University.



A gold standard in swallowing assessment, now offered in the comfort of your patients' homes.

What is FEES?

FEES stands for Fiberoptic Endoscopic Evaluation of Swallowing. It was developed in 1988, and has been repeatedly validated over three decades as one of only two true objective evaluations of swallowing, together with a Modified Barium Swallow Study (MBSS).

The clinician passes a thin endoscope a few inches through the nasal cavity, and a tiny camera at the end of the scope allows them to look into the patient's throat. The laryngeal structures are viewed while the patient eats and drinks. The clinician is able to visualize how the laryngeal structures move during the swallowing process, and whether aspiration events occur with certain food/liquid textures or under certain conditions.



Equipment Matters

We use the best and latest technology from ATMOS: a distal-chip endoscope that provides the highest resolution currently available, with a narrow scope diameter for increased patient comfort.



High-definition visualization

HD technology allows us to see even small amounts of aspirated material. Above, we see significant amounts of residue in the pharynx, but also small amounts of aspirated material inside the trachea.

We always include photographs in our reports which we share with the referring doctors. We sometimes even note masses or other structural abnormalities that warrant outside referrals.

What's wrong with a "regular" swallow evaluation?

A clinical ("bedside") swallow evaluation is an excellent tool for diagnosis and management of oral dysphagia (e.g., chewing and pocketing problems in the mouth). However, it cannot assess or diagnose problems in the pharynx or larynx, and it is extremely unreliable for detection of aspiration. Studies show that even well-trained clinicians can miss approximately 40% of aspiration events [1].

Even in cases where aspiration is suspected, a bedside evaluation does not provide any information as to why. This makes it difficult or impossible to develop a treatment plan to remediate the problem. Quite simply, *we cannot treat what we cannot see*.

Using FEES, a well-trained clinician will not only detect and record aspiration events, but more importantly, they will describe WHY the patient is aspirating, including which physiological processes are impaired. This is critical for the development of an effective treatment plan for dysphagia, such as determining which exercises would be appropriate, safest diet level, and any compensatory strategies.

Why is it important to detect aspiration?

Aspiration pneumonia is a leading cause of death among the elderly. Of patients with stroke, up to 1/3 contract aspiration pneumonia, which significantly increases mortality [2]. Among people with Parkinson's Disease, aspiration pneumonia is the most common cause of mortality [3].

Why not a Modified Barium (aka Videofluoroscopic) Swallow Study?

An MBS study is another excellent tool for diagnosing pharyngeal dysphagia, and it may still be indicated for certain specific patients because of their particular deficits. However, because it must be performed in the radiology suite of a hospital, it is typically more expensive and time consuming. In NYC, there is often a 6-week wait time for the first available appointment. For patients with limited mobility, traveling to a hospital and devoting a full day for a 10-minute test may not be feasible or desirable.

Additionally, MBS studies expose the patient to radiation. Because of the concern for radiation exposure, the study is typically limited to only a few minutes. The patient takes a few small bites/sips of barium, which does not always resemble the



Further Questions

Please don't hesitate to reach out to us at 212-842-0080 or info@outreach-rehab.com.

Clinical questions may be sent directly to our endoscopist Meghan Ahern at mahern@outreach-rehab.com.

References

1. Lim et al. (2014). Accuracy of bedside clinical methods compared with Fiberoptic Endoscopic Examination of Swallowing (FEES) in determining the risk of aspiration in acute stroke patients. *Dysphagia*, 16(1), 1-6.
2. Armstrong & Mosher (2011). Aspiration pneumonia after stroke: Intervention and prevention. *Neurohospitalist*, Apr;1(2), 85-93.
3. Pennington et al. (2010). The cause of death in idiopathic Parkinson's disease. *Parkinsonism & Related Disorders*, 16(7), 434-437.
4. Nacci et al. (2016). Complications with Fiberoptic Endoscopic Evaluation of Swallowing in 2,820 examinations. *Folia Phoniatr Logop.*, 68(1), 37-45.
5. Lee & Lee (2019). Safety of flexible endoscopic evaluation of swallowing examination in gastroenterological practice. *Turk J Gastroenterology*, 30(2), 148-154.

the texture of natural foods.

In comparison, FEES can be done in the comfort of patients' homes with their own natural foods, and it requires no radiation. The study is not time-limited, meaning that we can visualize a greater number of swallows.

We can also see the surface anatomy of the pharynx and larynx, including changes in the appearance of tissues concerning for acid reflux or other abnormalities.

Is FEES safe?

FEES is an extremely safe, minimally invasive procedure that may be done in any setting, including in the home. No anesthesia is needed. The most notable complication is minor epistaxis (nose bleed) that resolves on its own, which occurs in less than 0.2% of patients [4]. Over 30 years of use, there have been no records in the literature of complications that did not resolve on their own within minutes.

Are there any patients who should not receive FEES?

FEES is contraindicated for patients with recent facial trauma and/or bilateral nasal obstruction.

What about patients with dementia or cognitive impairments?

We find that patients with dementia or cognitive impairments are just as likely to tolerate the procedure as any other patient group.

Is it painful?

Patients most often describe the procedure as mildly uncomfortable but not painful. In a recent study, almost half of patients reported zero discomfort, and 50% reported only mild discomfort [5].

The vast majority of patients report that they would gladly have the procedure again if warranted.

The most frequent comment we get following the test is "oh, that was it? That wasn't bad at all!"

How do I request FEES for my patient?

You can fax a prescription to us at 917-591-8494, specifying "FEES", "Endoscopic Swallow Study", and/or "Objective Swallow Study", or use Outreach's referral form.