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GSHA Convention Presentation

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Flexible Endoscopic Examination of Swallowing:

Clinical indication for Dysphagia Management Throughout the Spectrum of Care

Relevant Financial Disclosures

- I am currently employed as the Agency Administrator for Integra Rehabilitation and I provide Flexible Endoscopic Examination of Swallowing (FEES) for Integra Rehabilitation's customers.

- Integra Rehabilitation is a sponsor at this convention.

Relevant Non-Financial Disclosures

- Past-President of GSHA and have held various other positions both elected and appointed within the organization since 2004.

My first exposure to “Flexible Endoscopic Examination of Swallowing” was at GSHA in the early 2000s.

- Nancy Swigert, PhD, CCC-SLP was an invited speaker and in the content of her talk she mentioned that “Flexible Endoscopic Examination of Swallowing” was a tool that was –
  - Emerging
  - Recently added to our ASHA Scope of Practice
  - Not quite mainstream
  - Had lots of potential and measured “something”, but we we time what that “something” was that we were measuring.
  - I tucked this away in the back of my mind…

It has been a good year for FEES in my health system…

Integrity
The Cornerstone
of our Service

- Servicing around 90 locations in Georgia
- We have made FEES ”instantly accessible” for all the therapists through out our system
- Currently employing two full time, one PRN and have started the training process for a third SLP that will be part-time initially, but transition to full time.
- As a system, we have embraced that “on demand” visualizations for swallowing is the right thing to do from a clinical standpoint.

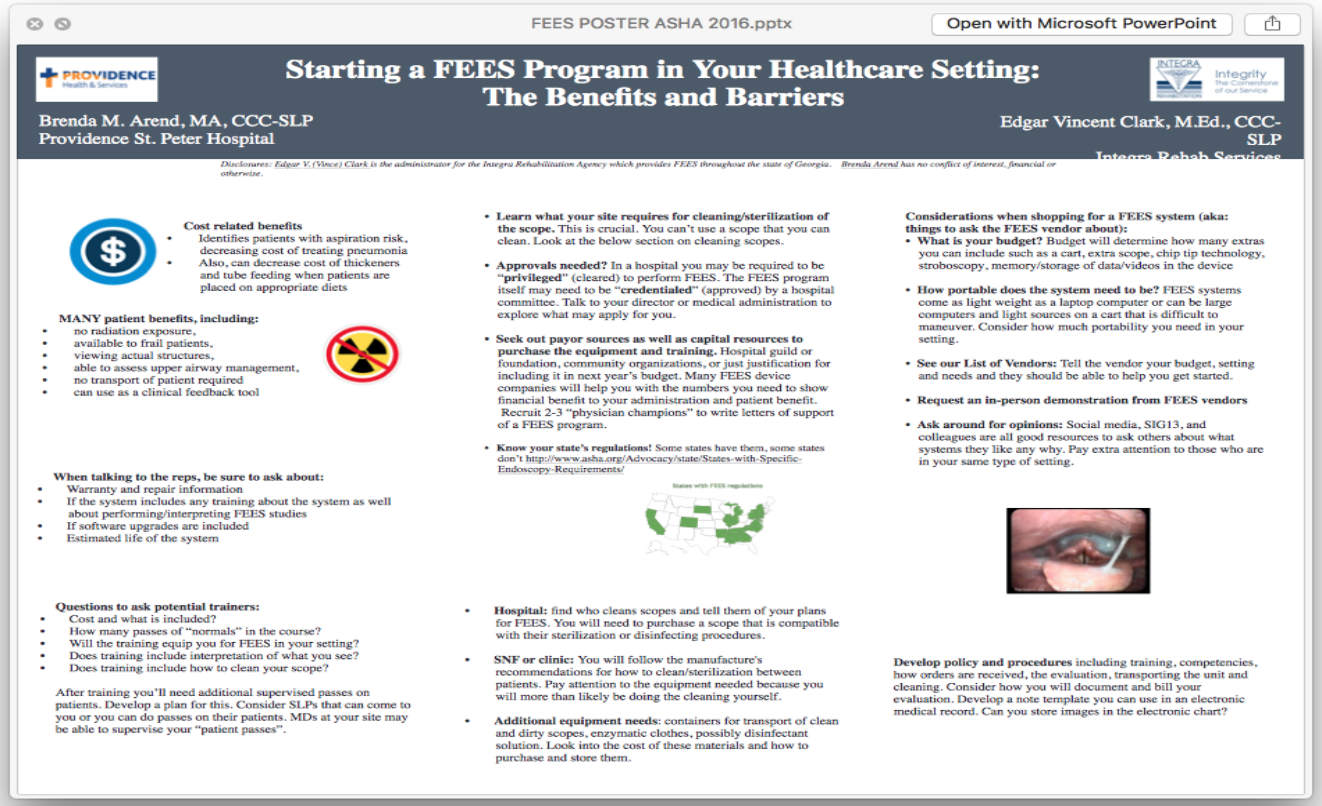
Continued…

Integrity
The Cornerstone
of our Service

- Increased interdisciplinary collaboration with advanced practitioners, nurses and respiratory therapists buildings.
- Fully able to assist trach/vent patients back to PO status in our respiratory rehab oriented locations
- Able to better judge progress by being able to offer multiple visualizations for patients
- Able to assist our system by decreasing altered diets, decreasing treatments related to dysphagia and helping to keep residents out of the hospital

Starting a FEES Program in Your Healthcare Setting: The Benefits and Barriers
ASHA Convention, November 19, 2016 Philadelphia, PA

Brenda Thomas-Arend, MA, CCC-SLP – Providence St. Peter Hospital, Olympia, WA
Edgar Vincent Clark, MEd, CCC-SLP – Integra Rehabilitation Agency, Dalton, GA



Why Flexible Endoscopic Examination of Swallowing?

- Evaluation of Oropharyngeal Dysphagia
  - Determine potential anatomic / physiologic cause of dysphagia
  - Secretions management
  - Swallowing function for food and liquid
  - Determine response to therapeutic maneuvers and interventions to improve swallow

How does Flexible Endoscopic Examination of Swallowing Work?

- Laryngoscope is passed through nose to view larynx and other structures
- Patient completes various tasks to evaluate sensory and motor status
- Food and liquid are trialed, as indicated
- Swallow functions / safety evaluated
- Interventions determined

Advantages of Flexible Endoscopic Examination of Swallowing.

- Can be performed at bedside (no radiation)
- Instant determination of foods that can be safely ingested
- Patient fatigue better controlled / assessed
- Excellent visualization of swallow safety / function
- Treating Speech-Language Pathologist may be present
- Family / Caregivers may be present

Contra-indications of Flexible Endoscopic Examination of Swallowing

- Severe movement disorders and/or severe agitation
- Base of skull / facial fracture
- Sino-nasal and anterior skull - based tumors / surgery
- Nasopharyngeal stenosis

FEES COMPARED TO MBSS

Both are now considered “gold standard” examinations.

FEES has repeatedly demonstrated a sensitivity equal to or greater than MBSS in determining whether a patient is exhibiting penetration, aspiration, delay in swallowing initiation and pharyngeal secretions that cannot be detected during an MBSS.

FEES COMPARED TO MBSS

- They are just tools for the evaluation of swallowing
- They are as good as what your clinical question is

FEES Safety

SAFETY OF FEES: AVIV, MURRY, ZSCHOMMLER, COHEN, AND GARTNER(2005)

Prospective study of 1340 consecutive FEESST exams over 4 1⁄2 year period

Outpatients and inpatients

Results:

- 1 incidence of epistaxis = 0.07%
- NO episodes of airway compromise

FEES Safety

WARNECKE, TEISMANN, OELENBERG, HAMACHER, RINGLESTEIN, SCHABITZ, AND DZIEWAS (2009)

Prospective study of FEES exams in 300 acute stroke patients

1 year period

Neurologist + SLP

Safety parameters and patient discomfort rating

Continued…

Results:

- NO airway compromise
- NO decrease in level of consciousness
- NO symptomatic brady/tachycardia
- NO laryngospasm
- NO epistaxis that required special treatment

Continued…

6% incidence of self-limiting epistaxis >80% patients reported excellent

Well tolerated and safe procedure with SLP + neurologist on acute stroke unit

Possible reason for increased incidence of epistaxis may be due to characteristics of the acute stroke population

FEES is a safe procedure in the hands of a trained SLP

Multiple researchers have looked at the rate of complications

- Less than 1% adverse effects
- None of the complications were serious
- Epistaxis and vasovagal episodes were most likely.

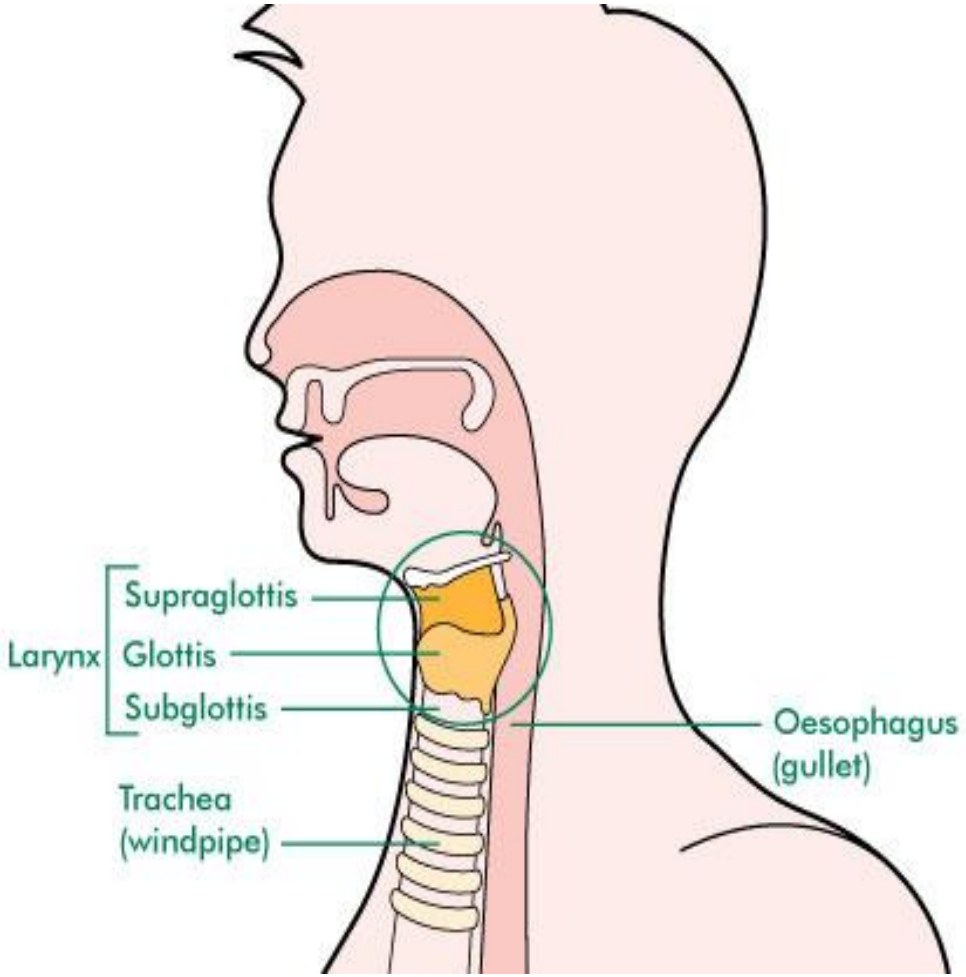
HISTORY OF FEES

FEES HAS BEEN UTILIZED TO DIAGNOSE SWALLOWING DISORDERS SINCE 1986

Susan Langmore, Ph.D., and her research team coined the term FEES in 1986 and published the first data demonstrating the effectiveness of the procedure in 1988.

In a question and answer session for SpeechPathology.com in 2007, George Charpied, M.S.,CCC-SLP made the following evidence based practice observations

- Where FEES equipment is available, it is supplanting the subjective bedside swallowing assessment in the acute care setting. (*Bastian, 1993, Dysph. 8: 359; Langmore and Logeman, 1991, AJSLP 1:13*)
- Limitations of PHG (MBSS) include difficulties with patient cooperation, limited resolution for micro-aspiration, and the exposure to radiation. For these reasons flexible endoscopic examination of swallowing (FEES) is effectively competing with PHG as the gold standard for evaluation swallowing function (*Bastian, 1993, Dysph. 8: 359; Langmore and Logeman, 1991, AJSLP 1:13*).
- There is no radiation exposure, patient's can be seen in their rooms, and it is excellent at discerning the minute aspirations not visualized with fluoroscopy.



I have come to realize that when using FEES, we are "assessing" the functional aspects of the upper airway…

"During swallowing, the pharynx changes from an airway to a food channel."

Matsuo K, Palmer JB. Coordination of Mastication, Swallowing and Breathing. *The Japanese dental science review*. 2009;45(1):31-40. doi:10.1016/j.jdsr.2009.03.004.

Grasping the impact that we can have on upper airway function opens up opportunities for collaboration with other professionals…

- Assessing in trach and vent
- Assessing in Long Term Acute Care Hospitals
- More consistent feedback on progress in out patient therapy
- Providing in-house swallow assessments in Skilled Nursing Facilities
- Assessing proper placement of any nasal tubes or orally placed tubes as part of the FEES procedure
- Screenings during FEES for reflux, lesions, physiologic/anatomical abnormalities

Our knowledge with FEES assessments makes us more valuable to the team…

- FEES usage is only going to increase
- The technology will continue to become easier and more convenient
- SLPs will be trained earlier and FEES will most likely become an ”expected” skill to work in healthcare similar to the ability to perform clinical swallow examinations and modified barium swallow studies
- We MUST maintain a high level of competence in our training or risk losing this valuable tool to other providers with an interest in swallowing disorders

AMERICAN SPEECH-LANGUAGE-HEARING ASSOCIATION

Accreditation

Achieve the Gold Seal

ASHA is clear about what will make SLPs in Acute Care settings valuable now and in the future…

What This Means for SLPs and Audiologists?

- **Hospitals will be the most common entity to manage rehabilitation services.**
- **Hospitals will be motivated to limit rehabilitation services to those that will reduce costs in overall care, including prevention of hospital readmissions.**
- **Dysphagia services will be in greatest demand of all services rendered by speech-language pathologists (SLPs)**
- **Motivation for speech-language services will be postponed until after the 30-day post-discharge date. This is similar to historical trends in acute care hospital prospective payment practices through discharge.**
- **SLPs and audiologists need to demonstrate to hospital administrators the potential value of their services in every chronological stage of care.**

http://www.asha.org/practice/Health-Care-Reform/Post-Acute-Care-Bundling/

Neither test's purpose is to "detect aspiration"…

- FEES and the MBSS are essential in the determination of WHY someone is aspirating. Aspiration is the consequence of a malfunctioning system.
- Never would a Physical Therapist do any exam just to watch the patient fall down.
- When patients aspirate on an MBSS or FEES many more factors go into determining if they remain safe for PO intake
- What did the aspirate? How much? How often? What is the general health of the patient like.

Ashford, J.A. (2013). FEES: Instrumental Dysphagia Assessment Training Manual. Nashville, TN: Author

Langmore, S. (2001). Endoscopic Evaluation and Treatment of Swallowing Disorders. New York: Thieme

Clinical utility of the modified barium swallow. Dysphagia. 2000 Summer;15(3):136-41. Martin-Harris B1, Logemann JA, McMahon S, Schleicher M, Sandidge J.

My clinical experience, training, and particular swallow examination allows me to make accurate determinations about the underlying cause and severity of my patients dysphagia… so there.

CSE (Clinical Swallow Exam) vs An Instrumental

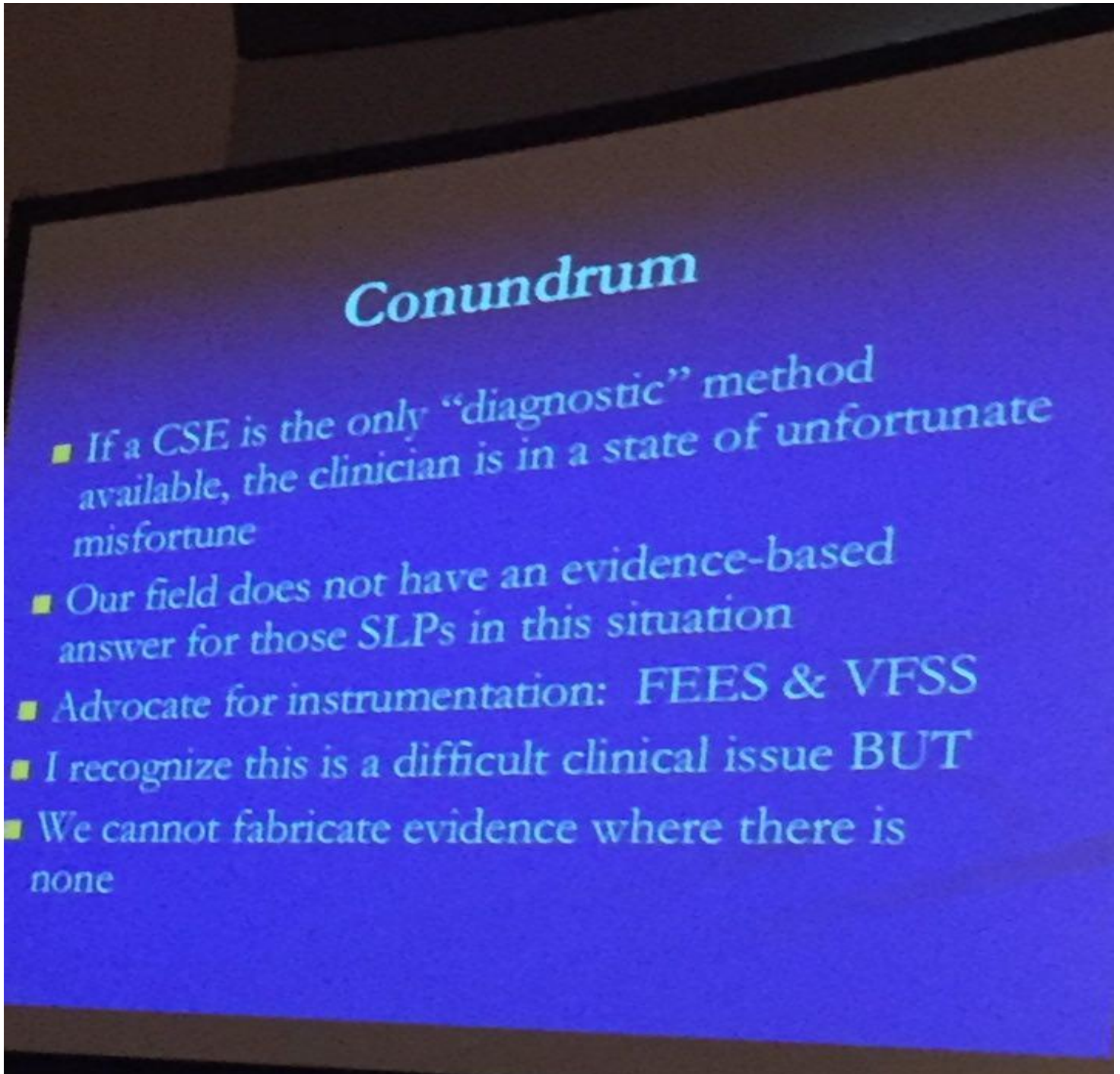
- Clinicians must examine their own long held beliefs to make sure they have incorporated new insights from from emerging scientific literature
- Most importantly, clinicians must be willing to let go of beliefs and familiar actions that are no longer sufficient to meet the demands of clinical practice.
- In other words, “Change is Good”
- Simply put: All studies that compare the CSE to FEES/MBSS determine that the CSE alone misses a high rate of those that are aspirating.
- The CSE doesn’t do the job it claims to do.

Hoffman L. Prologue: Improving clinical practice from the inside out. Lang Speech Hear Svs Schools. 2014;45:89-91.

Leder SB, Suiter DM, and Warner HL: Advantages & Disadvantages of CSE Compared with Simultaneous FEES. ASHA Convention 2015

BE AN ADVOCATE!!!

- WE must demonstrate the necessity for the tools we want to make clinical decisions
- WE should be able to demonstrate why these tools are cost effective OR figure out a way to make them cost effective
- WE are the experts. WE can not expect other professinals (who may or may not be medical personal) to know why we need certain items
- Know where to find your answers. ASHA, SIG13, Dysphagia Research Society, Journals, Blogs, and experts in the field.
- The answers and guidence are out there.


Conundrum
If a CSE is the only "diagnostic" method available, the clinician is in a state of unfortunate misfortune
Our field does not have an evidence-based answer for those SLPs in this situation
Advocate for instrumentation: FEES & VFSS
I recognize this is a difficult clinical issue BUT
We cannot fabricate evidence where there is none

Ramsey DJC, Smithard DG, and Kalra L. Early Assessments of Dysphagia and Aspiration Risk in Acute Stroke Patients. Stroke. 2003; 34: 1252-1257