Editorial

The Bedside Swallowing Evaluation When Endoscopy Is an Option: What Would You Choose?

One of the perils of clinical practice is the inability to identify subjects at high risk for potentially devastating events. One measure of this risk is the false negative rate (FNR) which determines the failure of a test to identify a group at high risk. Improved diagnostic tests that can identify accurately subjects at high risk for aspiration pneumonia are needed. Dr. Leder's study [1] identifies some of the significant issues that clinicians taking care of patients with swallowing problems, heretofore referred to as swallowologists, regularly encounter. In Dr. Leder's study, in which identification of aspiration risk in acute stroke patients using a clinical, noninstrument-based examination is compared with that of endoscopy, the FNR for the clinical evaluation was 14% [1]. While Dr. Leder emphasized that the false positive rate for a clinical examination was too high (70%), the number that would cause greater concern to most clinicians is the 14% FNR. That FNR is a number where patients inadvertently get hurt. Furthermore, a 14% FNR brings particular devastation to the patient, their family, and other nonswallowologist caregivers because they are all initially told that the patient is in a safe clinical situation *vis-à-vis* their swallowing problem.

Dr. Leder's results are strongly supported by previous work that addressed the issue of FNRs and the prediction of aspiration pneumonia in acute stroke patients with dysphagia [2]. That study compared the FNR for aspiration pneumonia between patients managed with videofluoroscopy and patients managed with videoendoscopy with laryngopharyngeal sensory testing. The study showed that the FNR for fluoroscopy was over 20%, while that for endoscopy was 0% [2]. This work underscores the importance of Dr. Leder's current study and adds further credence

to his assertion that "even if the clinical examination is negative, visualization of the pharyngeal swallow is necessary" [1].

One common clinical situation that Dr. Leder's work will hopefully go a long way toward providing proper guidance for is where a bedside evaluation alone—at sites where both endoscopy and fluoroscopy are available—results in a dietary modification for the patient. Intuitively, this type of clinical practice is dangerous for the patient. Now, finally, clinicians have real data that clearly point out the fallacy of relying on a bedside evaluation when instrumentation is possible for the patient.

References

1. Leder SB, Espinosa JF: Aspiration risk after acute stroke: comparison of clinical examination and fiberoptic endoscopic evaluation of swallowing. *Dysphagia* 17:214–218, 2002.
2. Aviv JE, Sacco RL, Mohr JP, Thompson JLP, Levin B, Sunshine S, Thomson J, Close LG: Laryngopharyngeal sensory discrimination testing with modified barium swallow as predictors of aspiration pneumonia after stroke. *Laryngoscope* 107:1254–1260, 1997

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