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# **Assessing Dietary Advancement for Dysphagia Patients at Risk for Aspiration**

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### INTRODUCTION

Fiberoptic endoscopic evaluation of swallowing (FEES) evaluates oral intake safety by allowing direct observation of laryngeal function before and after swallowing. The purpose of this study was to delineate the impact of abnormal vocal fold mobility and altered laryngeal sensation on dietary management in hospitalized patients previously diagnosed with aspiration.

#### STUDY DESIGN

Case series.

#### **MATERIAL AND METHODS**

A retrospective chart review was performed for 300 FEES studies on 263 patients between June 2012 and March 2016. Data regarding laryngeal sensation (palpating the arytenoid mucosa and observing for quick vocal fold adduction), aspiration, vocal fold mobility, and pre- and post-FEES diet were collected and statistical analysis performed.

#### RESULTS

Patients were significantly more likely to have aspiration during FEES when laryngeal sensation was deficient versus intact (OR=0.218, p<0.0001). When aspiration was noted, it was significantly more likely that a feeding tube was recommended after FEES (OR=4.914, p<0.0001). Patients with intact versus deficient laryngeal sensation were significantly more

likely to advance their diet after FEES (OR=2.383, p<0.0001). Patients were less likely to have regression in diet when vocal fold mobility was intact (OR=0.744) versus diminished (OR=0.256).

## **CONCLUSION**

FEES testing in hospitalized patients at risk for aspiration identified intact laryngeal sensation as a significant factor in predicting aspiration and diet advancement. Vocal fold mobility and presence of aspiration on FEES exam were useful in predicting the recommendation of feeding tubes. These findings have potential as predictive tools for dietary advancement and discharge planning.

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