**FEES protocol**

**Part A. Laryngopharyngeal structures - anatomy and physiology**

**1. Velopharyngeal competency**

|  |  |
| --- | --- |
| Tasks: | Oral and nasal sounds, sentences and dry swallow |

**2. Pharynx** (including base of tongue, epiglottis, valleculae, posterior and lateral pharyngeal walls, lateral channels, pyriform sinuses)

|  |  |
| --- | --- |
| Tasks: | * Puff cheeks - dilate pharynx and open pyriform sinuses * Post-vocalic “l”, “Paul is tall” - retract base of tongue * Strained high pitch on /i/ or pitch glide to top of pitch range - contraction of lateral pharyngeal walls * Observe general movement during speech and dry swallowing |

**3. Larynx and supraglottis** (including aryepiglottic folds, interarytenoid space, false and true vocal folds, subglottic shelf, proximal trachea)

|  |  |
| --- | --- |
| Tasks: | Observe laryngeal movement and vocal fold mobility during:   * + Breathing at rest   + Gentle and effortful breath hold   + Adduction on cough/throat clearing   + Sniff (abduction)   + Phonation on /i/   Observe epiglottic retroflexion on dry swallowing |

**4. Laryngopharyngeal sensation**

|  |  |
| --- | --- |
| Tasks: | Observe briskness and adequacy of glottic closure (LAR laryngeal adductor reflex) or other response such as a cough, grunt or patient withdrawal in response to light touch of the scope against the base of tongue, posterior pharyngeal wall and/or the epiglottis.  During the FEES observe response to secretions, residue, penetration and aspiration - inferences of sensation can be gained from this. |

**5. Secretions**

|  |  |
| --- | --- |
| Tasks: | Use a secretion rating scale (samples available in Appendix G).  If the patient is unable to manage secretions you may introduce one drop of blue or green dye onto the tongue to enhance visibility and observe dry swallowing. |

**Part B. Bolus presentation**

If safe, proceed with trials of the following:

Ice chips (according to local guidelines), thin liquids, modified liquids, regular and modified diet textures. The order and variety of trials administered should be tailored to the individual.

Observe:

* Amount and location of premature spillage
* Timing of swallowing
* Overall strength of the swallow and whiteout (note: whiteout is not seen when using some types of nasendoscopes)
* Pharyngeal residue
* Penetration and aspiration
* Evidence of fatigue
* Regurgitation from proximal oesophagus to hypopharynx

**Part C. Therapeutic interventions**

Evaluate the effectiveness of postural modifications, manoeuvres, bolus modifications, compensatory strategies and sensory enhancement on the swallow.

**Part D. Biofeedback**

Encourage the patient to observe the examination to facilitate understanding of swallowing, recommendations, and to learn therapeutic interventions.