**Indications for selecting FEES and Videofluoroscopy**

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| **Clinical Query** | **Videofluoroscopy** | **FEES** |
| Oral phase assessment | Observable  Comprehensive examination of swallowing process | Not directly observable  Inferred on FEES from clinical assessment findings, premature spillage and efficiency of chewing |
| Palatal function | Significant impairment observable  Estimation of quantity of regurgitation and extent within nasopharynx | Observable  Assessment of impairment possible during pre-swallow observations  Nasal regurgitation of secretions, fluids and diet can be detected |
| Presence of penetration/ aspiration | Observable but less sensitive than FEES.  In neurological populations, may have insufficient trials to determine aspiration risk due to need to control screening time. | Observable pre- and post-swallow.  Penetration/aspiration during the swallow cannot be directly viewed, but can typically be inferred by subglottic shelf residue.  As the assessment is not time-limited due to radiation exposure, there is opportunity for increased oral trials and therefore increased assessment of aspiration risk. |
| Base of tongue retraction | Observable at all stages of oropharyngeal swallow and quantifiable if using e.g. MBSImP | Observable during pre-swallow assessment and ‘pharyngeal squeeze’ manoeuvre.  Inferred from base of tongue and valleculae residue post-swallow. |
| Epiglottic inversion | Observable at all stages of pharyngeal swallow and quantifiable if using e.g. MBSImP | Observable, but gradations of impairment not quantifiable currently |
| Laryngeal elevation | Observable at all stages of pharyngeal swallow and quantifiable if using e.g. MBSImP | Not observable but can be inferred from observation of epiglottic deflection and pre-swallow pitch raise assessment during FEES |
| Anterior hyoid movement | Observable at all stages of pharyngeal swallow and quantifiable if using e.g. MBSImP | Not observable |
| Manoeuvres | Effect of manoeuvres observable but may be restricted due to control of screening times | Observable  Biofeedback can be used to train manoeuvres  Skills can be honed through repeated assessment |
| Cervical Oesophageal dysfunction e.g. pouch, regurgitation | Observable however difficult to differentiate consistencies over duration of assessment. | Regurgitation and differentiation between consistencies can be observed but requires VFS to determine cause.  Can be used to assess for safe consistencies and reduce screening time required in subsequent VFS |
| Estimation of amount of aspiration | Observable, however limited by screening times and unable to see events between trials. | May be observed pre- or post- swallow, but not intra-swallow.  Can observe continuously throughout assessment without breaks between trials. |
| Suspected tracheo-oesophageal fistula | Observable | Not observable |
| Secretion management | Not observable | Observable |
| Laryngopharyngeal anatomy and physiology, laryngeal integrity | Not observable | Observable |
| Fatigue | Not directly observable due to controlled screening times | Observable |
| Assess with real food | Not possible – items affected by weight of barium, increased moisture from contrast ‘coating’ | Real fluids and food can be given as usually eaten |
| Medications | Not observable | Observable |
| Biofeedback | Possible, but may be limited due to shorter screening time | Achievable whilst assessment underway |
| Patient medically unstable e.g. on ICU, tracheostomy cuff inflated | Not possible | Indicated |
| Patient unfit for VFS e.g. poor sitting balance, posture obscuring view | Not possible | Indicated |
| Patient inappropriate for FEES e.g. | Indicated | Not possible |
| High risk of aspiration where aspiration of contrast is contraindicated | Not possible | Indicated |
| Trial of ice chip protocol | Only if barium ice chips available | Indicated |
| Suspected laryngopharyngeal reflux | Not possible | Possible to identify symptoms e.g. arytenoid oedema and erythema, regurgitation |