

**Supplementary Table 2. Penetration aspiration scale**

Category	Score	Descriptions
No penetration or aspiration	1	Contrast does not enter the airway
	2	Contrast enters the airway, remains above vocal folds; no residue
Penetration	3	Contrast remains above vocal folds; visible residue remains
	4	Contrast contacts vocal folds; no residue
	5	Contrast contacts vocal folds; visible residue remains
	6	Contrast passes glottis; no subglottic residue visible
Aspiration	7	Contrast passes glottis; visible subglottic residue despite patient's response
	8	Contrast passes glottis ; visible subglottic residue ; absent patient response