

Additional file 4: Excluded outcomes

#	Author, Year	Verbatim	Definition	Measure- ment	Timepoints	Frequency	Reason for exclusion
1	Ayres, 2017	Prior state of secretion in nasopharyngeal structures, oropharynx, laryngopharynx	N/S	FEES	pre, post (4w)	2	Observations that were made, but not measured and not reported
2	Ayres, 2017	Thickening on the posterior laryngeal wall	Presence/absence of thickening on the posterior laryngeal wall	FEES	pre, post (4w)	2	Observations that were made, but not measured and not reported
3	Ayres, 2017	Tremor in structures (BOT, vallecula)	Presence/absence of tremor in structures (BOT, valleculae)	FEES	pre, post (4w)	2	Observations that were made, but not measured and not reported
4	Ayres, 2017	Early escape	Characterized by the presence of food in the hypopharynx or larynx before the swallowing reflex was triggered	FEES	pre, post (4w)	2	Observations that were made, but not measured and not reported
5	Ayres, 2017	Vallecular stasis in glossoepiglottic folds and pyriform sinus	Characterized by accumulation of food after the third swallowing on the mentioned structures	FEES	pre, post (4w)	2	Observations that were made, but not measured and not reported
6	Ayres, 2017	Penetration	Characterized by the presence of food in the laryngeal vestibule	FEES	pre, post (4w)	2	Observations that were made, but not measured and not reported
7	Ayres, 2017	Tracheal aspiration	Characterized by food intake in the region located below the vocal folds, in the subglottic region and in the trachea, at any time of swallowing	FEES	pre, post (4w)	2	Observations that were made, but not measured and not reported
8	Ayres, 2017	Cough reflex	Presence/absence	FEES	pre, post (4w)	2	Observations that were made, but not measured and not reported
9	Ayres, 2017	Ability to manipulate flows	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
10	Ayres, 2017	Postural control	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
11	Ayres, 2017	Fatiguability	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
12	Ayres, 2017	Anatomy and oral, pharyngeal and laryngeal physiology	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
13	Ayres, 2017	Orofacial tones	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
14	Ayres, 2017	Oral apraxia	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
15	Ayres, 2017	Orofacial sensitivity	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
16	Ayres, 2017	Gag pharyngeal contraction	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported

17	Ayres, 2017	Saliva swallowing	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
18	Ayres, 2017	Cough and hawk	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
19	Ayres, 2017	Swallowing apraxia	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
20	Ayres, 2017	Oral residue	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
21	Ayres, 2017	Delayed swallowing reflex	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
22	Ayres, 2017	Reduction in laryngeal elevation	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
23	Ayres, 2017	Wet voice	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
24	Ayres, 2017	Multiple swallowing	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
25	Ayres, 2017	History of aspiration pneumonia Intake of food	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
26	Ayres, 2017		Level of oral food intake	FOIS	pre, post (4w)	2	Observations that were made, but not measured and not reported
27	Ayres, 2017	Interaction attention/ability	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
28	Ayres, 2017	Alert state	presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
29	Ayres, 2017	Awareness of the swallowing problem	Presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
30	Ayres, 2017	Awareness of secretion	presence/absence	CSE	pre, post (4w)	2	Observations that were made, but not measured and not reported
31	Feng, 2019	Consciousness	N/S	SSA	pre, post (4w)	2	Observations that were made for overall SSA score
32	Feng, 2019	Head and trunk control	N/S	SSA	pre, post (4w)	2	Observations that were made for overall SSA score
33	Feng, 2019	Lip closure	N/S	SSA	pre, post (4w)	2	Observations that were made for overall SSA score
34	Feng, 2019	Voice strength	N/S	SSA	pre, post (4w)	2	Observations that were made for overall SSA score
35	Feng, 2019	Gag reflex	N/S	SSA	pre, post (4w)	2	Observations that were made for overall SSA score

36	Feng, 2019	Laryngeal movement	Presence/absence by observation of the patient drinking (scale from 18-46)	SSA	pre, post (4w)	2	Observations that were made for overall SSA score
37	Feng, 2019	Repetitive swallowing	Presence/absence by observation of the patient drinking (scale from 18-46)	SSA	pre, post (4w)	2	Observations that were made for overall SSA score
38	Feng, 2019	Laryngeal function after swallowing	Presence/absence by observation of the patient drinking (scale from 18-46)	SSA	pre, post (4w)	2	Observations that were made for overall SSA score
39	Feng, 2019	Time required to swallow	Presence/absence by observation of the patient drinking (scale from 18-46)	SSA	pre, post (4w)	2	Observations that were made for overall SSA score
40	Feng, 2019	Breathing	clinical examination (scale from 18-46)	SSA	pre, post (4w)	2	Observations that were made for overall SSA score
41	Feng, 2019	Wheezing during swallowing	presence/absence by observation of the patient drinking (scale from 18-46)	SSA	pre, post (4w)	2	Observations that were made for overall SSA score
42	Heijnen, 2012	N/S	N/S	FEES	N/S	N/S	No specification of outcomes being measured
43	Heijnen, 2012	N/S	N/S	VFS	N/S	N/S	No specification of outcomes being measured
44	Khedr, 2019	Diagnosis of dysphagia	- N/S (a score on the SDQ of ≥ 11 indicates dysphagia.)	SDQ	pre	1	Is reported as an outcome but was only conducted for assessing dysphagia pre treatment for inclusion
45	Silva-Arone, 2021	N/S	N/S	VFS: Eisenhuber scale	pre, post (3m, 6m)	3	No specification, outcome was only reported in unpublished Master thesis, referenced by Battel et al. (2020)
46	Wei, 2017	Mis-inhalation	N/S	N/S	post (6m)	1	No definition of the outcome, unclear to what this relates and what was measured

CSE: Clinical Swallow Evaluation; FEES: Fiberoptic Evaluation of Swallowing; N/S: not specified; SDQ: Swallowing Disturbance Questionnaire; SSA: Standardized Swallow Assessment; VFS: Videofluoroscopy of Swallowing; w: weeks