

Supplementary Data (Online only)

Supplementary Table 1. Univariate analysis of clinical predictors for dysphagia with high risk of aspiration (DHA) (FEES-proven)

Variable	DHA (n=30)	No Dysphagia (n=26)	p-value
Age, mean \pm SD	70 \pm 14	69 \pm 12	n.s.
NIHSS, mean \pm SD	13 \pm 5	8 \pm 4	<0.001
Established Criteria			
Dysarthria ¹	8 (27%)	10 (39%)	n.s.
Dysphonia ¹	4 (13%)	7 (27%)	n.s.
Abnormal gag reflex	10 (33%)	2 (8%)	<0.05
Abnormal volitional cough	19 (63%)	8 (31%)	<0.05
Cough after swallow	21 (70%)	5 (19%)	<0.01
Voice change after swallow ¹	1 (3%)	1 (4%)	n.s.
New Criteria			
Aphasia	30 (100%)	18 (69%)	<0.001
3 (no aphasia)	0	8 (31%)	
2 (mild/rest aphasia)	2 (6%)	4 (15%)	
1 (moderate aphasia)	1 (3%)	2 (8%)	
0 (severe aphasia)	27 (90%)	12 (46%)	
Buccofacial Apraxia	26 (87%)	7 (27%)	<0.001

Patients with mild dysphagia without risk of aspiration (n=11) were not included in this analysis.

¹ Due to impaired speech production caused by acute stroke-related aphasia, the items dysarthria, dysphonia, voice change after swallow could only be assessed in 31, 31, and 33 patients, respectively.

Supplementary Table 2. Sensitivity, Specificity, PPV and NPV for clinical items predicting DHA (FEES-proven)

Item	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)
Dysarthria (n=31)	72	50	44	77
Dysphonia (n=31)	36	65	36	65
Abnormal gag reflex (n=56)	33	92	83	55
Abnormal volitional cough (n=56)	63	69	70	62
Cough after swallow (n=56)	70	81	81	70
Voice change after swallow (n=33)	9	95	50	68
Aphasia (n=56)	100	31	63	100
Buccofacial Apraxia (n=56)	87	73	79	83