

FIBER-OPTIC EVALUATION OF SWALLOWING

Berlin Dysphagia Index

Name: \_\_\_\_\_ Birth: \_\_\_\_\_

Diagnosis: \_\_\_\_\_

**Date**

<b>Label</b>
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**Question:**

<b>Feeding</b>	Oral	PEG	Naso-Gastric	Parenteral
<b>Tracheostomy Tube (TT)</b>	None	Speaking Tube	Cuffed	De-Cuffed
	Eat de-cuffed		Eat cuffed	
<b>Therapy</b>	None	F.O.T.T.	Functional	Frequency:.../W
<b>Anaesthesia</b>	Nose	Pharynx	Larynx	
<b>Way of examination</b>	Nose R	Nose L	Oral	Tracheostoma
<b>Posture</b>	Sitting	Wheelchair	Bed	
<b>Glasgow-Coma-Scale</b>				

**Results**

**Mucosa membrane / Swallowing rate**

<b>Mucosa</b>	Normal	0	Red	1	Dry	1
<b>Swallowing rate</b>	1 min:		2 min:		5 min:	

**Palate**

<b>Findings</b>	Symmetry	Hyperplasia	R	L	Defect	R	L
<b>Mobility</b>	Equal	Limited	R 1	L 1	Absent	R 2	L 2
<b>Closure</b>	Equal	Limited	R 1	L 1	Absent	R 2	L 2

**Posterior pharyngeal Wall**

<b>Findings</b>	Symmetry	Hyperplasia	R	L	Defect	R	L
<b>Mobility</b>	Equal	Limited	R 1	L 1	Absent	R 2	L 2

**Tongue base / Valleculae**

<b>Findings</b>	Symmetry	Hyperplasia	R	L	Defect	R	L
<b>Mobility</b>	Equal	Limited	R 1	L 1	Absent	R 2	L 2

**Piriform Sinus**

<b>Findings</b>	Symmetry	Hyperplasia	R	L	Defect	R	L
<b>Mobility</b>	Equal	Limited	R 1	L 1	Absent	R 2	L 2

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### Larynx

#### Anatomy

<b>Arytenoid cart.</b>	Symmetry	Hyperplasia	R	L	Defect	R	L
<b>Epiglottis</b>	Symmetry	Hyperplasia	R	L	Defect	R	L
<b>Pocket cords</b>	Symmetry	Hyperplasia	R	L	Defect	R	L
<b>Vocal cords</b>	Symmetry	Hyperplasia	R	L	Defect	R	L

#### Function

<b>Vocal Cords</b>	Symmetry	Hyperplasia	R	L	Defect	R	L
<b>Breath holding</b>	Possible	0	Limited	1	Impossible	2	
<b>Breath holding (Pressing)</b>	Possible	0	Limited	1	Impossible	2	
<b>Respiration</b>	Possible	0	Limited	1	Impossible	2	
<b>Phonation</b>	Possible	0	Limited	1	Impossible	2	

### Trachea (due to tracheostoma)

<b>Mucose</b>	Normal	Inflammation above cuff	Inflammation below cuff
<b>Salvia</b>	Above Cuff	Below Cuff	

### Sensitivity

	Right	Left
<b>Nose</b>		
<b>Epipharynx</b>		
<b>Palate</b>		
<b>Tongue base</b>		
<b>Pharyngeal wall</b>		
<b>Larynx</b>		

Score Findings	
<b>Total</b>	

(0 Deaf, + Felt, ++ Dislike, +++ Choke)

## SWALLOWING

### Salvia

	Examination / Swallowing impossible	8
<b>Assistance</b>	Spontaneous 0	With prompt 4
	With facilitation	4

#### Pharynx

Leaking	No	0	Yes	1
<b>Residues</b>	R	L		
Pharyngeal Wall		0		
Valleculae		0		
Piriform sinus		1		
Re-Swallow	Yes	0	No	3

#### Penetration/Aspiration

Normal	0
Supraglottal with cough	1
Supraglottal without cough	3
Glottal with cough	3
Glottal without cough	6
Subglottal with cough	7
Subglottal without cough	8

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Pureed Food

No Examination necessary		0	Examination / Swallowing not possible		8
<b>Tool</b>	Spoon				
<b>Food</b>	Jelly			Quantity	
<b>Assistance</b>	Spontaneous	0	With prompt	4	With facilitation 4

*Pharynx*

Leaking	No	0	Yes	1
<b>Residues</b>		R	L	
Pharyngeal Wall		0		
Valleculae		0		
Piriform sinus		1		
Re-Swallow	Yes	0	No	3

*Penetration/Aspiration*

Normal	0
Supraglottal with cough	1
Supraglottal without cough	3
Glottal with cough	3
Glottal without cough	6
Subglottal with cough	7
Subglottal without cough	8

Liquid

No Examination necessary		0	Examination / Swallowing not possible		8
<b>Tool</b>	Spoon		Cup		Straw
<b>Food</b>	Blue dye				Quantity
<b>Assistance</b>	Spontaneous	0	With prompt	4	With facilitation 4

*Pharynx*

Leaking	No	0	Yes	1
<b>Residues</b>		R	L	
Pharyngeal Wall		0		
Valleculae		0		
Piriform sinus		1		
Re-Swallow	Yes	0	No	3

*Penetration/Aspiration*

Normal	0
Supraglottal with cough	1
Supraglottal without cough	3
Glottal with cough	3
Glottal without cough	6
Subglottal with cough	7
Subglottal without cough	8

Solid Food

No Examination necessary		0	Examination / Swallowing not possible		8
<b>Tool</b>	Spoon		Fork		
<b>Food</b>	Bread				Quantity
<b>Assistance</b>	Spontaneous	0	With prompt	4	With facilitation 4

*Pharynx*

Leaking	No	0	Yes	1
<b>Residues</b>		R	L	
Pharyngeal Wall		0		
Valleculae		0		
Piriform sinus		1		
Re-Swallow	Yes	0	No	3

*Penetration/Aspiration*

Normal	0
Supraglottal with cough	1
Supraglottal without cough	3
Glottal with cough	3
Glottal without cough	6
Subglottal with cough	7
Subglottal without cough	8

<b>Score Swallowing capability</b>	
<b>Total</b>	

**PROTECTION OF THE RESPIRATORY TRACT**

Coughing, clearing the throat, transport of secrete and cough and swallow are evaluated during the swallowing tests. The weighting of the swallowing capability is carried out separated for each consistency.

**Result of Swallowing capability**

Score	Significance	Weighting
0 <= 3	Normal to moderate reduction	Complete
4 < 8	Reduction needs therapy	Incomplete
>=8	Solid reduction, needs absolute therapy	Impossible

<b>Coughing/Clearing throat</b>	Voluntary	0	Involuntary	0	Absent	2
<b>Transport of Secrete</b>	Productive	0	Limited	1	Absent	2
<b>Cough and Swallow</b>	Yes	0	Incomplete	1	No	2
<b>Swallowing of Salvia</b>	Complete	0	Incomplete	1	Impossible	2
<b>Swallowing of Puree</b>	Complete	0	Incomplete	1	Impossible	2
<b>Swallowing of Liquid</b>	Complete	0	Incomplete	1	Impossible	2
<b>Swallowing of Solid Food</b>	Complete	0	Incomplete	1	Impossible	2

Score Protection	
<b>Total</b>	

**Therapy recommendations**

Check therapy recommendation

Score	Significance	Therapy
0	Normal	No therapy necessary, TT removable
<= 3	Moderate reduction	If necessary therapy
>=4	Coughing complete, Swallowing incomplete	Needs therapy, Decuffed TT with speaking valve possible, if necessary enteral feeding
>=6	Coughing incomplete, Swallowing complete	Needs therapy, if necessary tracheostomy, During therapy decuff TT if necessary, Needs enteral feeding
>=8	Coughing absent, Swallowing absent	Needs therapy and tracheostomy, Needs cuffed TT, Needs enteral feeding