

GUSS

(G u g g i n g S w a l l o w i n g S c r e e n)¹

Patient	Date:
	Time:
	Investigator:

1. Preliminary Investigation / Indirect Swallowing Test

	<i>YES</i>	<i>NO</i>
VIGILANCE <i>(The patient must be alert for at least 15 minutes)</i>	1 <input type="checkbox"/>	0 <input type="checkbox"/>
COUGH and/or THROAT CLEARING <i>(Voluntary cough! Patient should cough or clear his or her throat twice)</i>	1 <input type="checkbox"/>	0 <input type="checkbox"/>
SALIVA SWALLOW		
• SWALLOWING SUCCESSFUL	1 <input type="checkbox"/>	0 <input type="checkbox"/>
• Drooling <i>(Herausrinnen von Speichel aus dem Mund)</i>	0 <input type="checkbox"/>	1 <input type="checkbox"/>
• VOICE CHANGE <i>(hoarse, gurgely, coated, weak, choke on own saliva)</i>	0 <input type="checkbox"/>	1 <input type="checkbox"/>
SUM:		(5)
	1 – 4 = Investigate further² 5 = Continue with „Direct Swallowing Test“	

¹The Gugging Swallowing Screen. *Stroke*. 2007;38:2948 Michaela Trapl, SLT, MSc; Paul Enderle, MD, MSc; Monika Nowotny, MD; Yvonne Teuschl, PhD; Karl Matz, MD; Alexandra Dachenhausen, PhD Michael Brainin, MD

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(Gugging Swallowing Screen)¹

2. Direct Swallowing Test

(Material: Aqua bi, flat teaspoon, food thickener, bread)

<i>In the following order:</i>	1 →	2 →	3 →
	SEMISOLID*	LIQUID**	SOLID ***
DEGLUTITION:			
▪ Swallowing not possible	0 <input type="checkbox"/>	0 <input type="checkbox"/>	0 <input type="checkbox"/>
▪ Swallowing delayed <i>(> 2 sec.) (Solid textures > 10 sec.)</i>	1 <input type="checkbox"/>	1 <input type="checkbox"/>	1 <input type="checkbox"/>
▪ Swallowing successful	2 <input type="checkbox"/>	2 <input type="checkbox"/>	2 <input type="checkbox"/>
COUGH (involuntary): <i>(before, during or after swallowing – until 3 minutes later)</i>			
▪ Yes	0 <input type="checkbox"/>	0 <input type="checkbox"/>	0 <input type="checkbox"/>
▪ No	1 <input type="checkbox"/>	1 <input type="checkbox"/>	1 <input type="checkbox"/>
DROOLING:			
▪ Yes	0 <input type="checkbox"/>	0 <input type="checkbox"/>	0 <input type="checkbox"/>
▪ No	1 <input type="checkbox"/>	1 <input type="checkbox"/>	1 <input type="checkbox"/>
VOICE CHANGE: <i>(listen to the voice before and after swallowing- patient should speak „Oh“)</i>			
▪ Yes	0 <input type="checkbox"/>	0 <input type="checkbox"/>	0 <input type="checkbox"/>
▪ No	1 <input type="checkbox"/>	1 <input type="checkbox"/>	1 <input type="checkbox"/>
SUM:	(5)	(5)	(5)
	1 – 4 = Investigate further ² 5 = Continue „LIQUID“	1 – 4 = Investigate further ² 5 = Continue „SOLID“	1 – 4 = Investigate further ² 5 = NORMAL

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G U S S

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Instruction „Direct Swallowing Test“

- * First administer 1/3 - 1/2 teaspoon Aqua bi with food thickener (pudding-like consistency). If there are no symptoms apply 3 to 5 teaspoons. Assess after the 5th spoonful.
- ** 3, 5, 10, 20 ml Aqua bi – if there are no symptoms continue with 50 ml Aqua bi (Daniels et al. 2000; Gottlieb et al. 1996) Assess and stop the investigation when one of the criteria is observed.
- *** Clinical: Dry bread ; FEES: Dry bread which is dipped in coloured liquid.
- ² Use functional investigation such as Videofluoroscopic Evaluation of Swallowing (VFES) , Fiberoptic Endoscopic Evaluation of Swallowing (FEES)

S U M M A R Y

Sum „Indirect Swallowing Test“:	(5)
Sum „Direct Swallowing Test“:	(1 5)
Sum TOTAL:	(2 0)

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RESULTS		SEVERITY CODE	RECOMMENDATIONS
20	Semisolid / liquid and solid textures successful	Slight / No dysphagia Minimal risk of aspiration	<ul style="list-style-type: none"> • Normal diet • Regular liquids • First time under supervision of the SLT or a trained stroke nurse !
15-19	Semisolid and liquid texture successful and solid unsuccessful	Slight dysphagia with a low risk of aspiration	<ul style="list-style-type: none"> • Dysphagic diet (pureed and soft food) • Liquids very slowly – one sip at a time • Functional swallowing assessments such as Fiberoptic Endoscopic Evaluation of Swallowing (FEES) or Videofluoroscopic Evaluation of Swallowing (VFES) • Refer to Speech and Language Therapist (SLT)
10-14	Semisolid swallow successful and liquids unsuccessful	Moderate dysphagia with a risk of aspiration	<p>Dysphagia diet beginning with:</p> <ul style="list-style-type: none"> • Semisolid textures such as baby food and additional parenteral feeding • All liquids must be thickened! • Pills must be crushed and mixed with thick liquid • No liquid medication!! • Further functional swallowing assessments (FEES, VFES) • Refer to Speech and Language Therapist (SLT) <p style="text-align: center;"><i>Supplementation with nasogastric tube or parenteral</i></p>
0-9	Preliminary investigation unsuccessful or semisolid swallow unsuccessful	Severe dysphagia with a high risk of aspiration	<ul style="list-style-type: none"> • NPO (non per os = nothing by mouth) • Further functional swallowing assessments (FEES, VFES) • Refer to Speech and Language Therapist (SLT) <p style="text-align: center;"><i>Supplementation with nasogastric tube or parenteral</i></p>

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