

Patient's label

# G U S S

(Gugging Swallowing Screen)

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Investigator: \_\_\_\_\_

## 1. Preliminary Investigation / Indirect Swallowing Test

|   |   | YES  | NO                         |
|---|---|--|----------------------------|
| <b>VIGILANCE</b>  | The patient must be alert for at least <u>15 minutes</u>  | 1 <input type="checkbox"/>   | 0 <input type="checkbox"/> |
| <b>COUGHING and/or THROAT CLEARING</b>  | Voluntary cough: The patient should cough or clear his/her throat twice   | 1 <input type="checkbox"/>   | 0 <input type="checkbox"/> |
| <b>SWALLOWING SALIVA</b>  | Conduct oral hygiene if the mouth is very dry<br>If the patient coughs during or after swallowing saliva please tick „No“ | 1 <input type="checkbox"/>   | 0 <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>Swallowing successful</li> </ul>         |   |  |                            |
| <ul style="list-style-type: none"> <li>Drooling</li> </ul>                      | Permanent severe saliva drooling  | 0 <input type="checkbox"/>   | 1 <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>Voice change after swallowing</li> </ul> | Gurgling, wet hoarse voice since onset of stroke  | 0 <input type="checkbox"/>   | 1 <input type="checkbox"/> |
|   | <b>SUM:</b>   | (5)  |                            |
|   |   | 1 – 4 = Stop the test<br>see GUSS-Evaluation<br>5 = Continue with part 2 |                            |

## 2. Direct Swallowing Test (Material: Water, food thickener, teaspoon, cup, syringe, bread, biscuit)

| In the following order  | SEMISOLID →   | LIQUID →  | SOLID   |
|---|---|---|---|
|   | ½ teaspoon of thickened water (IDDSI: Level 3)<br>If there are no symptoms apply 3-5 more teaspoons<br>Stop the investigation if one of the 4 aspiration criteria is observed | Offer 3, 5, 10, 20 ml of water in a cup followed by 50 ml of water. (sequential swallows)<br>Stop the investigation if one of the 4 aspiration criteria is observed | Offer a piece of bread without crust and/or a piece of biscuit (max. 1.5 x 1.5cm)<br>Stop the investigation if one of the 4 aspiration criteria is observed |
| <b>DEGLUTITION</b>  |   |   |   |
| <ul style="list-style-type: none"> <li>Swallowing not possible</li> </ul>   | 0 <input type="checkbox"/>  | 0 <input type="checkbox"/>  | 0 <input type="checkbox"/>  |
| <ul style="list-style-type: none"> <li>Swallowing delayed (semisolids, fluids &gt; 2 sec. solids &gt; 10 sec.)</li> </ul> | 1 <input type="checkbox"/>  | 1 <input type="checkbox"/>  | 1 <input type="checkbox"/>  |
| <ul style="list-style-type: none"> <li>Swallowing successful</li> </ul>   | 2 <input type="checkbox"/>  | 2 <input type="checkbox"/>  | 2 <input type="checkbox"/>  |
| <b>COUGHING (involuntary)</b><br><i>(before, during and after swallowing - until 3 minutes later)</i>                     |   |   |   |
| <ul style="list-style-type: none"> <li>Yes</li> </ul>   | 0 <input type="checkbox"/>  | 0 <input type="checkbox"/>  | 0 <input type="checkbox"/>  |
| <ul style="list-style-type: none"> <li>No</li> </ul>  | 1 <input type="checkbox"/>  | 1 <input type="checkbox"/>  | 1 <input type="checkbox"/>  |
| <b>DROOLING</b>   |   |   |   |
| <ul style="list-style-type: none"> <li>Yes</li> </ul>   | 0 <input type="checkbox"/>  | 0 <input type="checkbox"/>  | 0 <input type="checkbox"/>  |
| <ul style="list-style-type: none"> <li>No</li> </ul>  | 1 <input type="checkbox"/>  | 1 <input type="checkbox"/>  | 1 <input type="checkbox"/>  |
| <b>VOICE CHANGE</b><br><i>(Listen to the voice before and after swallowing - Patient should say „Ohhh“)</i>               |   |   |   |
| <ul style="list-style-type: none"> <li>Yes</li> </ul>   | 0 <input type="checkbox"/>  | 0 <input type="checkbox"/>  | 0 <input type="checkbox"/>  |
| <ul style="list-style-type: none"> <li>No</li> </ul>  | 1 <input type="checkbox"/>  | 1 <input type="checkbox"/>  | 1 <input type="checkbox"/>  |
|   | <b>SUM:</b>   | (5)   | (5)   |
|   |   | 1 – 4 = Stop the test<br>see GUSS-Evaluation<br>5 = Continue „Liquid“   | 1 – 4 = Stop the test<br>see GUSS-Evaluation<br>5 = Continue „Solid“  |
| <b>SUM:</b> (Indirect Swallowing Test AND Direct Swallowing Test) _____ (20)  |   |   |   |

# G U S S E V A L U A T I O N

## (Gugging Swallowing Screen)

| RESULTS |  | SEVERITY CODE   | RECOMMENDATIONS (related to IDDSI-Framework, <a href="http://www.iddsi.org">www.iddsi.org</a> )   |
|---------|--|---|---|
| 20      | Swallowing semisolids, liquids and solid textures successful                                   | Slight / No dysphagia with no or minimal risk of aspiration | <ul style="list-style-type: none"> <li>• Normal diet (Level: 7, 7minus)</li> <li>• Regular liquids (Level: 0)</li> <li>• First normal meal under supervision of a SLT/SLP or dysphagia-trained nurse to evaluate the swallowing ability of mixed consistencies</li> </ul>   |
| 15-19   | Swallowing semisolids successful, swallowing liquids can be deficient, solids can be deficient | Slight dysphagia with aspiration risk                       | <ul style="list-style-type: none"> <li>• Dysphagia diet (minced &amp; moist or soft &amp; bite-sized) (Level: 5 or 6)</li> <li>• Liquids thickened (Level: 1 or 2)</li> <li>• Water (Level: 0) should only be drunk after following the “Frazier Free Water Protocol”<br/>(Gillmann et al 2016)</li> <li>• <i>Optional:</i> Further functional swallowing assessments (FEES, VFES)<sup>1</sup></li> <li>• <i>Optional:</i> Refer to Speech&amp;Language Pathologist(SLP) or Speech&amp;Language Therapist (SLT)<sup>1</sup></li> </ul> <p style="text-align: center;"><i>Supplementation via PEG, nasogastric tube or parenteral + supplementary food</i></p> |
| 10-14   | Swallowing semisolids successful, swallowing liquids deficient                                 | Moderate dysphagia with aspiration risk                     | <ul style="list-style-type: none"> <li>• Pureed textures (Level: 3-4)</li> <li>• All liquids must be thickened (Level: 2-3)</li> <li>• Pills should be crushed and mixed with puree (Level: 3-4)</li> <li>• No liquid medication!</li> <li>• <i>Optional:</i> Further functional swallowing assessments (FEES,VFES)<sup>1</sup></li> <li>• <i>Optional:</i> Refer to Speech&amp;Language Pathologist (SLP) or Speech&amp;Language Therapist (SLT)<sup>1</sup></li> </ul> <p style="text-align: center;"><i>Supplementation via PEG, nasogastric tube or parenteral + supplementary food</i></p>   |
| 0-9     | Preliminary investigation unsuccessful or swallowing semisolids unsuccessful                   | Severe dysphagia with high risk of aspiration               | <ul style="list-style-type: none"> <li>• NPO (non per os = nothing by mouth)</li> <li>• <i>Optional:</i> Further functional swallowing assessments (FEES,VFES)<sup>1</sup></li> <li>• <i>Optional:</i> Refer to Speech&amp;Language Pathologist(SLP) or Speech&amp;Language Therapist (SLT)<sup>1</sup></li> </ul> <p style="text-align: center;"><i>Supplementation via PEG, nasogastric tube or parenteral</i></p>  |

<sup>1</sup> Use functional Investigations like: Fiberoptic Endoscopic Evaluation of Swallowing (FEES), Videofluoroscopic Evaluation of Swallowing (VFES) and Clinical Swallowing Examination (CSE) by Speech & Language Pathologists (SLP) or Speech & Language Therapists (SLT).