

## Script

### Novel Tools Test

#### Background

Important for use of novel tools in daily life

#### Items

- **5 items** plus 3 practice items, of which only the first one has to be executed; the other two can be executed if it is necessary for ensuring task comprehension
- 1 Item consists of the cylinder socket, **one cylinder and three tools**

#### Materials

- Evaluation sheet and pen
- Novel Tools (1 cylinder socket, 8 cylinders, 8 tools)

#### Instructions for the therapist

- Cylinder and tools are presented **centrally** in front of the patient. Or in case of **neglect** it rather should be **shifted** towards the unaffected side, so the patient is able to perceive all tools and parts of the cylinder. → three tools are laid down side by side according to the template on the evaluation sheet and the cylinder is set up centrally behind the tools (from patient's point of view)
- The test is seeking for the **safest variant** to lift the cylinder out of the socket.
- All tasks have to be solved with the **ipsilesional** hand. It is **not allowed to use the other hand for help**. Possible supportive functions are undertaken by the therapist.

#### Instructions for the patient

**“I will now show you a cylinder (show cylinder socket) and three tools (show three fingers and point to the place where you will put each tool). Please select the one tool that is most suitable to lift up the cylinder. Please connect the tool to the cylinder, lift the cylinder out of the socket, and then place the cylinder next to the socket on the table and put the tool back on the table (pantomime the movement). If you realize that you have chosen the wrong tool, you can always switch to another tool. We will start with one practice item. If you have any questions, please do not hesitate to ask them.”**

- If the first tool is wrong and the patient does not realize this, then remind the patient that: **“There is another tool that works better with this cylinder.”**
- If the first utilization is wrong: **“Maybe try another way to lift the cylinder up with this tool.”**

## Evaluation and interpretation

### – Selection Scale

- **First Correct** (2 Points) = 1<sup>st</sup> used tool was the correct one
- **Second Correct** (1 Point) = 2<sup>nd</sup> used tool was the correct one
- **Total Error** (0 Points) = 3<sup>rd</sup> used tool was the correct one or the patient did not select anything, and the therapist gave him the correct tool for utilization
- **Maximum number of points:** 10 points
- **Interpretation recommendation:** “The patient had severe/ moderate/ mild/ no difficulties to select the correct tools for the tasks.”

### – Production Scale

- Each one point is given for correct **grip-formation (G), grip-orientation (OT), movement-content (M) and movement-orientation (O)** → exactly defined on the evaluation sheet
- only patients which meet **all four criteria** on the Production Scale of one item can reach a “First or Second Correct” evaluation on the Execution Scale
- **Maximum number of points:** 20 points
- **Interpretation recommendation:** “The patient showed difficulties especially in the grip/ the orientation of thumb/ the movement-content/ the movement-orientation while performing the action. / The patient had no difficulties to execute the required movements.”

### – Execution Scale

- **only the correct tool** is evaluated for the execution
- **First Correct** (2 Points) = tool is used immediately in a correct way to lift the cylinder up safely
- **Second Correct** (1 Point) = tool is used correctly for 2<sup>nd</sup> attempt to lift the cylinder up safely
- **Total Error** (0 Points) = neither the 1<sup>st</sup> nor the 2<sup>nd</sup> attempt was successful
- **Maximum number of points:** 10 points
- **Interpretation recommendation:** “The patient had severe/ moderate/ mild/ no difficulties when using the tools.”

## Additional interpretation recommendations

- **Selection good – Production/ Execution bad:** “The patient can associate the correct tools with the cylinders but is not able to use them correctly.”
- **Selection bad – Production/ Execution good:** “The patient only understands the concept of the task when he is holding the correct tool in hand.”
- **Selection and Production/ Execution bad:** “The patient has no concept which tools and cylinders belong together. Further, he is not able to use the tools in a correct manner.”

## Correct execution

see Manual page 24