



Instructions for the ABILHAND-Stroke questionnaire

The ABILHAND-Stroke questionnaire

The ABILHAND questionnaire was developed as a measure of manual ability as perceived by the patient. It explores the most representative inventory of manual activities. Some items were selected from existing scales; others were devised to extend the range of activities. The first application of the questionnaire in a sample of rheumatoid arthritis patients (*Arch Phys Med Rehabil* 1998; 79: 1038-42) showed that the items defined a valid manual ability scale. A second application of the questionnaire in a larger sample of chronic stroke patients showed that the unimanual activities (usually realized with one hand) were too easy for the patients. So, a subset of 23 bimanual activities (usually realized with two hands) has been retained and calibrated for chronic stroke patients (*Stroke* 2001; 32: 1627-34). ABILHAND was originally developed using the Rasch measurement model. It allows to convert ordinal scores into linear measures located on a unidimensional scale.

Procedures

The ABILHAND questionnaire is administered on an interview basis (patients do not realize the activities). Patients are asked to estimate the ease or difficulty in performing each activity, when the activities are done:

- Without other technical or human help (even if the patient actually uses help in daily life);
- Irrespective of the limb(s) actually used to do the activity;
- Whatever the strategy used (any compensation is allowed).

During the evaluation, a 3-level response scale is presented to the patients. Patients are asked to rate their perception on the response scale as either "Impossible", "Difficult" or "Easy". Activities not attempted in the last 3 months are not scored and are entered as missing responses (tick the question mark). For any activity the four potential answers are:

- **Impossible:** the patient is unable to perform the activity without using any other help;
- **Difficult:** the patient is able to perform the activity without any help but experiences some difficulty;
- **Easy:** the patient is able to perform the activity without any help and experiences no difficulty;
- **Question mark:** the patient cannot estimate the difficulty of the activity because he/she has never done the activity. Note that when a patient has never attempted the activity, the rater needs to make sure why it is so. If an activity was never attempted because it is impossible, then it must be scored as "Impossible" rather than "Question mark".

The instructions are given to the patient only at the beginning of the test. Five items are used for training in order to help the patient in feeling each level of the rating scale and in using the whole amplitude of the response scale. The subsequent activities are neither preceded nor followed by any instruction. The examiner can repeat the instructions whenever the patient shows some hesitation in answering.

Activities order

The activities of the ABILHAND questionnaire are presented in a random order to avoid any systematic effect. Ten different random orders of presentation are used. The rater must select the next one of the 10 orders for each new assessment, no matter which patient is tested.

Package content

- 1 instruction sheet;
- Testing forms in 10 random orders (10 sheets);
- Response scale presented to the patient during the evaluation (1 sheet).

ABILHAND-Stroke - Manual Ability Measure (雙手操作能力問卷 - 成人)

Chinese version - Taiwan

Patient _____

Date _____

以下活動對你來說的 困難程度	做不到	很難做得到	很容易做得到	?
1. 拉上褲子拉鍊				
2. 剝洋蔥皮				
3. 削鉛筆				
4. 撬開瓶蓋 (酒瓶等)				
5. 鏟一個人的手指甲				
6. 削馬鈴薯				
7. 扣上褲子鈕扣				
8. 打開罐子				
9. 剪一個人的手指甲				
10. 打開一包洋芋片				
11. 拉上褲子拉鍊				
12. 釘釘子				
13. 在麵包上塗上奶油				
14. 洗雙手				
15. 打開一包洋芋片				
16. 穿針				
17. 切肉				
18. 包裝禮物				
19. 拉上外套的拉鍊				
20. 在麵包上塗上奶油				
21. 剝堅果殼				
22. 打開信封				
23. 把牙膏擠在牙刷上				

ABILHAND-Stroke - Manual Ability Measure (雙手操作能力問卷 - 成人)

Chinese version - Taiwan

Patient _____

Date _____

以下活動對你來說的 困難程度	做不到	很難做得到	很容易做得到	?
1. 打開一包洋芋片				
2. 打開信封				
3. 在麵包上塗上奶油				
4. 撬開瓶蓋 (酒瓶等)				
5. 鏹一個人的手指甲				
6. 把牙膏擠在牙刷上				
7. 剝洋蔥皮				
8. 打開罐子				
9. 拉上褲子拉鍊				
10. 在麵包上塗上奶油				
11. 釘釘子				
12. 削鉛筆				
13. 剪一個人的手指甲				
14. 剝堅果殼				
15. 穿針				
16. 洗雙手				
17. 扣上褲子鈕扣				
18. 削馬鈴薯				
19. 拉上外套的拉鍊				
20. 拉上褲子拉鍊				
21. 打開一包洋芋片				
22. 包裝禮物				
23. 切肉				

ABILHAND-Stroke - Manual Ability Measure (雙手操作能力問卷 - 成人)

Chinese version - Taiwan

Patient _____

Date _____

以下活動對你來說的 困難程度	做不到	很難做得到	很容易做得到	?
1. 包裝禮物				
2. 拉上褲子拉鍊				
3. 鏟一個人的手指甲				
4. 在麵包上塗上奶油				
5. 切肉				
6. 扣上褲子鈕扣				
7. 打開罐子				
8. 削馬鈴薯				
9. 拉上褲子拉鍊				
10. 削鉛筆				
11. 穿針				
12. 在麵包上塗上奶油				
13. 洗雙手				
14. 打開一包洋芋片				
15. 打開一包洋芋片				
16. 撬開瓶蓋 (酒瓶等)				
17. 拉上外套的拉鍊				
18. 剪一個人的手指甲				
19. 釘釘子				
20. 打開信封				
21. 剝洋蔥皮				
22. 把牙膏擠在牙刷上				
23. 剝堅果殼				

ABILHAND-Stroke - Manual Ability Measure (雙手操作能力問卷 - 成人)

Chinese version - Taiwan

Patient _____

Date _____

以下活動對你來說的 困難程度	做不到	很難做得到	很容易做得到	?
1. 釘釘子				
2. 打開一包洋芋片				
3. 打開一包洋芋片				
4. 穿針				
5. 在麵包上塗上奶油				
6. 拉上外套的拉鍊				
7. 切肉				
8. 銼一個人的手指甲				
9. 包裝禮物				
10. 在麵包上塗上奶油				
11. 洗雙手				
12. 拉上褲子拉鍊				
13. 削馬鈴薯				
14. 拉上褲子拉鍊				
15. 扣上褲子鈕扣				
16. 把牙膏擠在牙刷上				
17. 剝堅果殼				
18. 剝洋蔥皮				
19. 打開罐子				
20. 撬開瓶蓋 (酒瓶等)				
21. 打開信封				
22. 剪一個人的手指甲				
23. 削鉛筆				

ABILHAND-Stroke - Manual Ability Measure (雙手操作能力問卷 - 成人)

Chinese version - Taiwan

Patient _____

Date _____

以下活動對你來說的 困難程度	做不到	很難做得到	很容易做得到	?
1. 打開一包洋芋片				
2. 銼一個人的手指甲				
3. 拉上褲子拉鍊				
4. 把牙膏擠在牙刷上				
5. 拉上褲子拉鍊				
6. 在麵包上塗上奶油				
7. 拉上外套的拉鍊				
8. 撬開瓶蓋 (酒瓶等)				
9. 穿針				
10. 打開罐子				
11. 釘釘子				
12. 剪一個人的手指甲				
13. 打開一包洋芋片				
14. 洗雙手				
15. 切肉				
16. 包裝禮物				
17. 削馬鈴薯				
18. 削鉛筆				
19. 打開信封				
20. 在麵包上塗上奶油				
21. 剝洋蔥皮				
22. 扣上褲子鈕扣				
23. 剝堅果殼				

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Chinese version - Taiwan

Patient _____

Date _____

以下活動對你來說的 困難程度	做不到	很難做得到	很容易做得到	?
1. 撬開瓶蓋 (酒瓶等)				
2. 打開一包洋芋片				
3. 削鉛筆				
4. 打開信封				
5. 在麵包上塗上奶油				
6. 洗雙手				
7. 打開一包洋芋片				
8. 包裝禮物				
9. 打開罐子				
10. 剝堅果殼				
11. 鏗一個人的手指甲				
12. 拉上外套的拉鍊				
13. 把牙膏擠在牙刷上				
14. 拉上褲子拉鍊				
15. 剝洋蔥皮				
16. 在麵包上塗上奶油				
17. 剪一個人的手指甲				
18. 穿針				
19. 切肉				
20. 拉上褲子拉鍊				
21. 削馬鈴薯				
22. 扣上褲子鈕扣				
23. 釘釘子				

ABILHAND-Stroke - Manual Ability Measure (雙手操作能力問卷 - 成人)

Chinese version - Taiwan

Patient _____

Date _____

以下活動對你來說的 困難程度	做不到	很難做得到	很容易做得到	?
1. 拉上褲子拉鍊				
2. 剪一個人的手指甲				
3. 銼一個人的手指甲				
4. 剝堅果殼				
5. 釘釘子				
6. 拉上外套的拉鍊				
7. 削馬鈴薯				
8. 把牙膏擠在牙刷上				
9. 削鉛筆				
10. 扣上褲子鈕扣				
11. 在麵包上塗上奶油				
12. 洗雙手				
13. 穿針				
14. 打開信封				
15. 拉上褲子拉鍊				
16. 打開罐子				
17. 撬開瓶蓋 (酒瓶等)				
18. 剝洋蔥皮				
19. 打開一包洋芋片				
20. 切肉				
21. 包裝禮物				
22. 在麵包上塗上奶油				
23. 打開一包洋芋片				

ABILHAND-Stroke - Manual Ability Measure (雙手操作能力問卷 - 成人)

Chinese version - Taiwan

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以下活動對你來說的 困難程度	做不到	很難做得到	很容易做得到	?
1. 洗雙手				
2. 打開一包洋芋片				
3. 打開信封				
4. 剝堅果殼				
5. 拉上外套的拉鍊				
6. 撬開瓶蓋 (酒瓶等)				
7. 打開一包洋芋片				
8. 剪一個人的手指甲				
9. 在麵包上塗上奶油				
10. 穿針				
11. 扣上褲子鈕扣				
12. 切肉				
13. 拉上褲子拉鍊				
14. 包裝禮物				
15. 釘釘子				
16. 拉上褲子拉鍊				
17. 銼一個人的手指甲				
18. 剝洋蔥皮				
19. 在麵包上塗上奶油				
20. 打開罐子				
21. 把牙膏擠在牙刷上				
22. 削鉛筆				
23. 削馬鈴薯				

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Patient _____

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	以下活動對你來說的 困難程度	做不到	很難做得到	很容易做得到	?
1.	削馬鈴薯				
2.	洗雙手				
3.	剝洋蔥皮				
4.	撬開瓶蓋 (酒瓶等)				
5.	釘釘子				
6.	打開一包洋芋片				
7.	剝堅果殼				
8.	銼一個人的手指甲				
9.	扣上褲子鈕扣				
10.	在麵包上塗上奶油				
11.	把牙膏擠在牙刷上				
12.	包裝禮物				
13.	拉上褲子拉鍊				
14.	削鉛筆				
15.	穿針				
16.	拉上外套的拉鍊				
17.	切肉				
18.	剪一個人的手指甲				
19.	拉上褲子拉鍊				
20.	打開信封				
21.	打開一包洋芋片				
22.	在麵包上塗上奶油				
23.	打開罐子				

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Patient _____

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以下活動對你來說的 困難程度	做不到	很難做得到	很容易做得到	?
1. 打開一包洋芋片				
2. 把牙膏擠在牙刷上				
3. 打開一包洋芋片				
4. 在麵包上塗上奶油				
5. 打開罐子				
6. 打開信封				
7. 削馬鈴薯				
8. 削鉛筆				
9. 扣上褲子鈕扣				
10. 洗雙手				
11. 穿針				
12. 撬開瓶蓋 (酒瓶等)				
13. 拉上褲子拉鍊				
14. 剪一個人的手指甲				
15. 拉上褲子拉鍊				
16. 剝堅果殼				
17. 剝洋蔥皮				
18. 釘釘子				
19. 鏟一個人的手指甲				
20. 在麵包上塗上奶油				
21. 包裝禮物				
22. 拉上外套的拉鍊				
23. 切肉				

做不到	很難做得到	很容易做得到

Test package record

Scale definition	
Scale name	ABILHAND-Stroke
Scale version	1.0
Item orders	10
Scale reference	Stroke 2001; 32: 1627-34.
Calibration definition	
Online analysis	http://www.rehab-scales.org
Calibration reference	No specific calibration, refer to Stroke 2001; 32: 1627-34.
Language definition	
Language	Chinese
Country	Taiwan
Translated instructions	No
Translated items	Yes
Translated response scale	Yes
Translated from	English
Translation methodology	Forward-backward translations
Translation reference	None
Translation credits	None, translation performed by Professor Chia-Ling Chen (Department of Physical Medicine & Rehabilitation, Chang Gung Memorial Hospital, Taiwan)
Cross-cultural validation	None