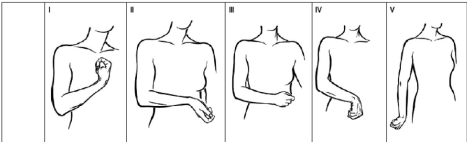



Management of Spasticity After Stroke: Checklist for people with lived experience

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The Management of Spasticity After Stroke Checklist has been developed to assist patients and their caregivers in managing spasticity. Spasticity is a condition in which there is an abnormal increase in muscle tone or stiffness of muscle, which might interfere with movement, speech, or be associated with discomfort or pain. Some spasticity may also be useful in certain muscle groups as an alternative to muscle voluntary activation to provide support in transfers or standing, for example. Spasticity is usually caused by damage to the central nervous system, within the brain or spinal cord. It is frequent amongst stroke survivors and usually manifests itself a few weeks to a few months after the stroke. There is effective treatment for this condition, therefore it is important to get patients referred to a spasticity specialist once symptoms are noticed.

This activity is part of the World Stroke Academy Life After Stroke project, that aims to improve the quality of support and educational material available globally on the topic of Life After Stroke.

	Question	Answer selection																								
1	<p>Do you have spasticity in your shoulders, arms or hands?</p>  <table border="1"> <tr> <td>Shoulder</td> <td>Internal rotation/ adduction</td> <td>Internal rotation/ adduction</td> <td>Internal rotation/ adduction</td> <td>Internal rotation/ adduction</td> <td>Internal rotation/ retroversion</td> </tr> <tr> <td>Elbow</td> <td>Flexion</td> <td>Flexion</td> <td>Flexion</td> <td>Flexion</td> <td>Extension</td> </tr> <tr> <td>Forearm</td> <td>Supination</td> <td>Supination</td> <td>Neutral</td> <td>Pronation</td> <td>Pronation</td> </tr> <tr> <td>Wrist</td> <td>Flexion</td> <td>Extension</td> <td>Neutral</td> <td>Flexion</td> <td>Flexion</td> </tr> </table> <p><small>Upper limb spasticity patterns. Note: All five upper limb patterns could be combined with any spastic hand and finger position (e.g. claw, spastic flexed, intrinsic lumbrical).</small></p>	Shoulder	Internal rotation/ adduction	Internal rotation/ adduction	Internal rotation/ adduction	Internal rotation/ adduction	Internal rotation/ retroversion	Elbow	Flexion	Flexion	Flexion	Flexion	Extension	Forearm	Supination	Supination	Neutral	Pronation	Pronation	Wrist	Flexion	Extension	Neutral	Flexion	Flexion	<p>Yes</p> <p>No</p>
Shoulder	Internal rotation/ adduction	Internal rotation/ adduction	Internal rotation/ adduction	Internal rotation/ adduction	Internal rotation/ retroversion																					
Elbow	Flexion	Flexion	Flexion	Flexion	Extension																					
Forearm	Supination	Supination	Neutral	Pronation	Pronation																					
Wrist	Flexion	Extension	Neutral	Flexion	Flexion																					
2	<p>Do you have spasticity in your legs, ankles or feet?</p> 	<p>Yes</p> <p>No</p>																								
3	<p>How long has it been since the onset of your spasticity?</p>	<p>years</p> <p>months</p> <p>weeks</p>																								

4

Which part of your body is affected by spasticity? Check all that apply:

Left side

Right side

Face

Face

Shoulder

Shoulder

Elbow

Elbow

Arm

Arm

Forearm

Forearm

Wrist

Wrist

Fingers

Fingers

Upper leg/thigh

Upper leg/thigh

Knee

Knee

Ankle

Ankle

Toes

Toes

5

Do you feel pain due to spasticity? Other type of discomfort?

Yes

Painful segment (lengthy period of pain >1min)

Pain at rest

Pain when passively mobilized

Pain with active movement

Painful spasms

Burning pain

Freezing pain

Numb pain

Tightness

Heaviness

No

6	Do you feel fatigue due to spasticity?	Yes												
		No												
7	Do you have spasms because of spasticity?	Yes												
		No												
8	Do you have contractures in the spastic limb, even when using another limb, or when someone else slowly moves your affected limb? (eg. restricted range of movement even when mobilizing your limb passively and slowly)	Yes												
		No												
9	<p>Does spasticity limit your ability to care for yourself or to perform other activities of daily living?</p> <ul style="list-style-type: none"> - Hygiene - Grooming - Dressing - Feeding - Using the toilet - Using splints 	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Yes	No													
Yes	No													
Yes	No													
Yes	No													
Yes	No													
Yes	No													
10	<p>Does spasticity limit your mobility ?</p> <ul style="list-style-type: none"> - Walking - Transfer (from one flat surface to another) - Standing - Falls 	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No	Yes	No	Yes	No	Yes	No				
Yes	No													
Yes	No													
Yes	No													
Yes	No													
11	<p>Does spasticity limit any other activity or participation?</p> <ul style="list-style-type: none"> - Sleeping - Leisure activities - Driving - Employment 	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No	Yes	No	Yes	No	Yes	No				
Yes	No													
Yes	No													
Yes	No													
Yes	No													

11

- Social participation
- Family participation
- Professional participation
- Sexual activity

Yes	No
Yes	No
Yes	No
Yes	No

12

What are your treatments for spasticity?
How many days weekly? ...

Stretching -
self / by a carer / by a professional

Range of motion exercises -
self / by a carer / by a professional

Task training exercises -
self / by a carer / by a professional

Grab/release

Reaching

Manual/bimanual tasks

Transfers

Balance

Walking

Strength training exercises -
self / by a carer / by a professional

Physical modalities -
self / by a carer / by a professional

Heat

Cold

Electrical stimulation

Magnetic stimulation

What are your treatments for spasticity?

How many days weekly? ...

Oral medication

Baclofen	Yes	No
Tizanidin	Yes	No
Benzodiazepins	Yes	No
Gabapentin/pregabalin	Yes	No

Botulinum toxin injection	Yes	No
Every how many months ?		

Splinting /orthotics	Yes	No
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Casting	Yes	No
---------	-----	----

Intrathecal baclofen	Yes	No
----------------------	-----	----

Surgery	Yes	No
Neurosurgery	Yes	No
Orthopaedic surgery	Yes	No

How many days weekly? ...

Stretching -
self / by a carer / by a professional

Range of motion exercises -
self / by a carer / by a professional

Task training exercises -
self / by a carer / by a professional

Grab/release

Reaching

Manual/bimanual tasks

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Balance

Walking

13

How many days weekly? ...

Stretching

Strength training exercises -
self / by a carer / by a professional

Physical modalities -
self / by a carer / by a professional

Heat

Cold

Electrical stimulation

Magnetic stimulation

14

How compliant are you to the spasticity
treatments?

STRETCHING

Fully compliant

Mostly compliant

Fairly non-compliant

Completely non-compliant

EXERCISING

Fully compliant

Mostly compliant

Fairly non-compliant

Completely non-compliant

TASK TRAINING

Fully compliant

Mostly compliant

Fairly non-compliant

Completely non-compliant

MEDICATIONS

Fully compliant

Mostly compliant

Fairly non-compliant

Completely non-compliant

ORTHOSIS USAGE

Fully compliant

Mostly compliant

Fairly non-compliant

Completely non-compliant

Are you considering, or have you ever considered discontinuing your current spasticity medication?

- A. I am currently considering discontinuing it.
- B. I have considered discontinuing it in the past.
- C. I have never considered discontinuing it.

If the answer to Q14 is A or B:
 How important were the following factors in your considering discontinuing your spasticity medication?
 [score 0 (unimportant) – 3 (important) for each]

	0 (Unimportant)	1 (Somewhat important)	2 (Important)	3 (Very Important)
Unable to easily attend the treatment clinic				
Financial costs of treatment are too great				
Other logistical reason [please specify]				
I experienced side effects from the treatment				
I feel the treatment has never been effective enough				
I feel the treatment was effective at first, but now it is not effective enough				
I feel the treatment is painful/unpleasant to administer				
My doctor feels the treatment is not working				
My doctor feels the treatment has worked and now I no longer need it				
I am going to receive a different medicine instead				
I am going to receive a surgical treatment instead				
I am going to receive a physiotherapy alone instead (ie. no medicine)				
Another reason for considering discontinuing your spasticity medication [Please specify]				

What barriers to spasticity management have you faced, if any?

Difficulty to access a spasticity specialist

Yes

No

Difficulty to perform positioning/exercises

Yes

No

Lack of access to occupational or physical therapy

Yes

No

Others, please state:

Treatment options for spasticity:

1. NONPHARMACOLOGIC TREATMENT OF SPASTICITY

- Stretching
- Fitting of splints/braces and serial casting
- Thermotherapy
- Neuromuscular electrical stimulation (NEMS)
- Functional electrical stimulation of upper and lower extremity
- Kinesiotherapy (PT/OT)
- Muscle strengthening
- Task training
- Aerobic training
- Use of robotics
- Use of virtual reality

2. PHARMACOLOGIC TREATMENT OF SPASTICITY

- Oral medications (Baclofen, Tizanidine, Dantrolene, Diazepam)
- Phenol/alcohol neurolysis
- Botulinum toxin
- Intrathecal baclofen
- Cryoneurolysis

3. SURGICAL TREATMENT OF SPASTICITY

- Orthopedic procedures
- Neurosurgical procedures

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