

(SCIRE logo appears on top right corner with the words “Spasticity and SCI,” “Downfalls of Treating Non-Problematic Spasticity” and “Part 7/7” in center.)

(Cut to medium close-up shot of Dr. Patricia Mills, Principal Investigator from the Faculty of Medicine in University of British Columbia.)

Dr. Patricia Mills: There are some downfalls to treating non-problematic spasticity.

(Medicine bottle graphic along with words “Oral Medications may treat spasticity but can come with side effects...” appear on screen.)

For example, oral medications, they’re very wonderful if they are treating a problematic spasticity, but they come with their own problems like side effects of fatigue, nausea, or confusion.

(Cut to scene of a man lying down and signaling toward his lower abdomen, while a physiotherapist listens before speaking.)

If you treat non-problematic spasticity, you could induce these side effects, when really what you’re treating is not worth the downside of those treatments.

(Graphic listing the positive and negative symptoms of upper motor neuron syndrome. Positive symptoms: Spasticity, clonus, increased reflexes and spasms. Negative symptoms: Weakness, loss of dexterity, fatigue, paralysis, and hyporeflexia.)

It is important to remember that spasticity is part of the upper motor neuron syndrome and that is also found in conjunction with other things like weakness and loss of dexterity.

(Scene of woman having difficulty with brushing her hair.)

A muscle that has lost the connection to the brain because of the lesion not only will experience involuntary muscle spasms, but you have more difficulty of engaging that muscle in strength, and coordinating the movements of that muscle.

(Scene of man walking with help of parallel bars while a physiotherapist watches.)

Sometimes, if you treat spasticity, you can actually unmask-involuntary muscle spasm is gone, but the weakness and loss of dexterity is still there.

(Return to medium close-up of Dr. Miller)

Individuals may come back and say that they’re actually doing worse with respect to their function as a result of treating their spasticity.

(Man on a wheelchair talking and listening to a physiotherapist.)

That's one of the reasons why it is important to really determine if the spasticity is truly problematic or not, and how that individual may or may not be using their spasticity at that time.

(Cut to scene of same man on bed again with physiotherapist moving his right leg.)

That may not be apparent until you treat the spasticity, and then you'll learn that that individual was using their muscle tone, muscle spasms, for a functional activity.

That's a trial and error situation, but it is something to keep in mind when you're considering initiating spasticity treatment.

(A man walking with help of parallel bars while physiotherapist watches.)

There's a lot of research being done right now in different methods to manage spasticity, it's very exciting times.

(Cut to close-up shot of Dr. Miller)

Certainly we have long ways to go before we find that we are able to adequately treat everyone with problematic spasticity while minimizing the downsides of treatment.

(Words "To learn more visit scireproject.com" and "follow us @SCIREProject" appear)

(Fades into next screen with words "Thank you to Principal Investigator Patricia Mills," and "Participants: Victor Winterfeld, Teri Thorson, Jami Bennett, Matthew Querée, Shannon Sproule and the rest of the SCIRE Team." Below: logos of the Rick Hansen Institute, University of British Columbia, icord, and Ontario Neurotrauma Foundation.)

(Words "Created by Merilin Paart at the Knowledge Mobilization Studio at the Centre for Hip Healthy and Mobility" and Knowledge Mobilization Studio logo appear on screen before fading into the blue background.)