A Schematic Outline of Assessment Tools Used by PTs and OTs in Rehabilitation of Spinal Cord Injured Persons in Western Denmark 2013

Hoffmann DD, PT, MR; Johannesen IL, MD, Spinal Cord Injury Centre of Western Denmark Department of Neurology, Regional Hospital of Viborg

Aims

The aim of the schematic outline is to ensure that the most appropriate tests are used and that the specificperformanceofeachtestiscarriedoutinaccordanewith international guidelines. In the long term we want to reach national agreement on selection and performance of tests.

Methods

All the tests were described in relation to: Name of the test, who is in charge of performing the test, indication for testing, when shouldwetest, scientific references to SCI, is there a test manual?

Test	Who is in charge of testing OT = Occupational Therapist PT = Physiotherapist	Who is tested / Indication for testing Pts = patients	When / Time of testing Conf. = interdisciplinary team conference
Manual muscle test	OT tests muscles distal of elbow PT tests the remaining muscles	Pts with observed impaired muscular function	Shortly after admission, before mid-term and discharge conf. and in between if significant change is observed. Re-test at control ad- mission
Passive and active range of mo- tion	OT (upper limb) and PT	Pts with observed reduced joint mobility	No standard procedure
Sollerman Hand Function Test	ОТ	Pts with cervical lesion and some remaining hand func- tion	When OT estimates that Pts can perform parts of the test. Re-test before discharge conf.
Biometrics Dynamo-meter and Pinchmeter	ОТ	Pts with cervical lesion and some remaining hand func- tion	When OT estimates that Pts have power enough to be tested Re-test before discharge conf.
SCIM III	OT (PT and nurse participates in scor- ing	All new SCI Pts > 15 yrs and all Pts admitted for a 4 weeks rehabilitation stay	Within 48 hours after admission, before midterm conf and within the last week of admission. Re-test at control admission
Canadian Occupational Perfor- mance Measure	ОТ	Occasionally used when it has been difficult to iden- tify the Pts' occupational problems	Rarely used No standard procedure
Modified Ashworth Scale	РТ	Pts with observed altered muscle tone	No standard procedure
Measurement of Peak Flow and FVC	РТ	All Pts admitted to the Spi- nal Cord Unit (if testable)	Within 48 hours after admission, before midterm and discharge conf. Re-test at control admission
10 meter walk test	РТ	All Pts with the ability to walk	
6 minute walk test	РТ	All Pts with the ability to walk	Before all conf. and in between if significant change is observed.
Timed up and Go	РТ	All Pts with the ability to stand up and sit down	Re-test at control admission
Bergs Balance Scale	РТ	All Pts with the ability to walk ≥9 on WISCI scale	(BBS also used when considering to allow Pts to walk unattended)
Walking Index of Spinal Cord In- jured II	РТ	All SCI Pts with the ability to walk	No standard procedure
L-Force	РТ	All Pts using the robotic as- sisted Lokomat in gait train- ing	Third session in the Lokomat and then every eighth session. Always test at last session
6 Minute Arm Test	РТ	All Pts participating in car- diovascular training using only upper extremities	First session.
Astrand 6 minute Cycle Test	РТ	All Pts participating in car- diovascular training using lower extremities	Re-rest close to discharge If possible re-test at control admission
Visual Analogue Scale	PT + OT	All Pts with pain	No standard procedure



Results and perspectives

The process of making the schematic outline has led to professional discussions and reflections on the quality and ustification of our choice of tests and the actual performance of them. It has allowed visibility to the other professionals, which hopefully leads to a larger interdisciplinary understanding and collaboration of working with the tests, both in terms of more experienced professionals and in relation to new recruits. Finally, it has led us to consider implementing the Penn Spasm Frequency Scale and more hand function tests.

Conclusions

There is a need for continuous monitoring of tests in order to ensure the quality of the clinical effort and in relation to the opportunity to contribute to international research on the area.

The intention is to keep the schematic outline updated and kept electronically accessible for all professions at the Spinal Cord Injury Centre in Western Denmark.

Contact email: dorte.hoffmann@midt.rm.dk

