



Can combination of 10-s Step test and 10-s Grip and Release test distinguish thoracic myelopathy from cervical myelopathy?

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Disclosures

- I have no potential conflict of interest to report

“Ten Second Step Test” as a New Quantifiable Parameter of Cervical Myelopathy

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- 10 second step test is an easily performed, quantitative task, and useful in assessing the severity of cervical myelopathy.
- In the diagnosis of thoracic myelopathy, no objective or quantitative evaluation method was reported

Purpose

- ✓ To investigate whether “the 10 second step test” can quantitatively evaluate the severity of “thoracic myelopathy”
- ✓ To elucidate whether combination of Step test and G&R test can distinguish thoracic myelopathy from cervical myelopathy

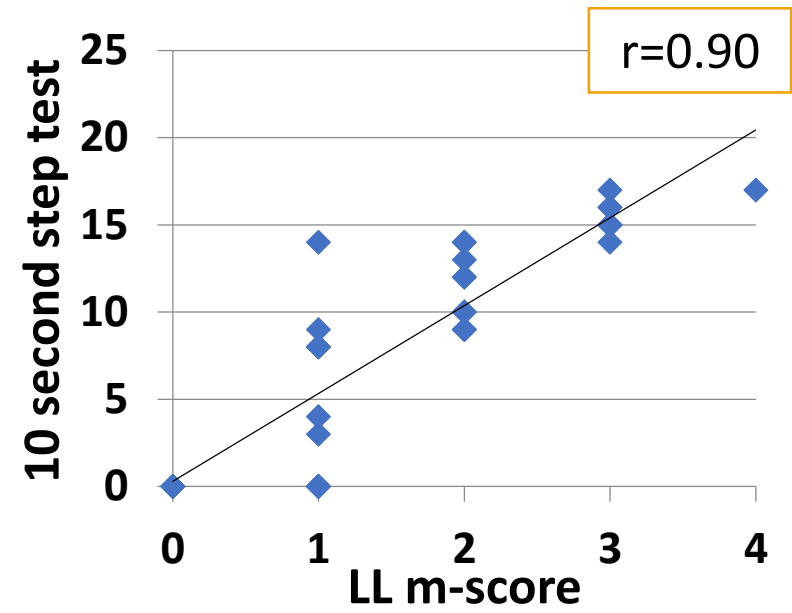
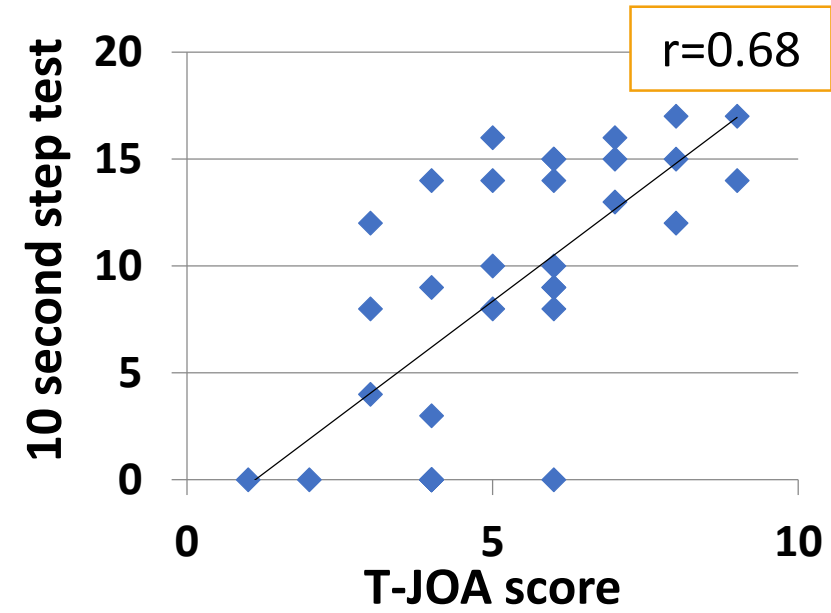
Materials and Methods

	Thoracic myelopathy	Cervical myelopathy
Total cases	33	123
Gender(M/F)	19/14	74/49
Average age	61.8 $\pm$ 14.3	63.3 + 12.1

- **T-JOA score** (modified from cervical JOA score)
- Motor function score of lower limb (**LL m-score**)
- 10s Grip and Release test (**G&R test**)
- 10s Step test (**Step test**)

were evaluated preoperatively and 1year after surgery

Results



		T-myelopathy	C-myelopathy	Control
Step test	preop	9.0 ± 6.2	10.4 ± 5.9	19.7 ± 3.4
	postop	14.0 ± 5.2 ↑	14.0 ± 5.4 ↑	
G&R test	preop	20.3 ± 4.8	16.3 ± 6.1	21.5 ± 5.5
	postop	21.5 ± 4.0 →	19.3 ± 4.9 ↑	

Conclusion/discussion

- Step test showed marked decrease preoperatively and postoperative increase in both T-myelopathy and C-myelopathy patients
- G&R test demonstrated significant decrease of before surgery and prominent increase after surgery in C-myelopathy patients alone
- The combination of Step test and G&R test are useful to diagnose thoracic myelopathy and cervical myelopathy

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