

Reliability of the Danish translation of the Trunk Control Measurement Scale (TCMS-DK)

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Conclusion and take home message

TCMS-DK appears to be a highly reliable method to assess trunk control in children with CP aged 6-15. This study provides Danish pediatric physiotherapists with a simple and reliable clinical measure to evaluate trunk control in children with independent sitting ability. Future studies are required to establish the validity and responsive to change of the TCMS-DK.

Background

The Trunk Control Measurement Scale (see fig. 1) has good clinimetric properties and is one of few measurement instruments that are specifically designed to quantify trunk control in children with cerebral palsy (CP).

Method

The TCMS was translated into Danish using a published standard method. Twenty-five children with spastic CP aged 6-15 (mean age 11y 3mo, 9 females, 16 males) in GMFCS levels I-IV were included in the study. These children were tested twice using the TCMS-DK within a period of 3-10 days. Videos of the tests were scored by two physical therapists

Trunk Control Measurement Scale

Statisk siddende balance

- 1 Sidder oprejst– 10 s
- 2 Sidder oprejst– løfter armene
- 3 Sidder oprejst– benene krydses af tester
- 4 Sidder oprejst– krydser benene
- 5 Sidder oprejst– abducere benene

Selektiv bevægelseskontrol

- 6 Læne sig fremover 45° og vende tilbage
- 7 Læne sig bagover 45° og vende tilbage
- 8 Lateral flexion – øverste truncus (albue til briksen)
- 9 Lateral flexion – nederste truncus (løfte bækkenet)
- 10 Rotation – øverste truncus
- 11 Rotation – nederste truncus
- 12 Vrikke bækkenet (lateral flexion og rotation)

Dynamisk siddende balance

- 13 Række fremad
- 14 Række til siden – bilateral
- 15 Række over midtlinien– bilateral

Fig 1 Summary of the Trunk Control Measurement Scale.

Results

Relative reliability (ICC_{2,1}) was excellent for all for inter-rater intra-day was 0.986, intra-rater inter-day was 0.941, and inter-rater inter-day was 0.936.