

Trunk Balance and Maintaining a Body Position – the Cornerstone of Functional Activities

In rehabilitation practice, mobility limitations such as changing and maintaining body position, carrying and moving objects, walking, and moving are common problems encountered by both patients and rehabilitation professionals. To perform these activities, one needs not only good strength, endurance, flexibility, and coordination of the extremity muscles but also strong functioning trunk muscles. The trunk muscles must first be activated to maintain trunk stability, then only movements of extremities and functional activities are possible. Trunk balance is also represented in the International Classification of Functioning, Disability and Health (ICF) as item d415 - maintaining a body position. It is defined as staying in the same body position as required, such as remaining seated or remaining standing for carrying out a task, in play, work, or school.

Trunk balance is an important component of the rehabilitation process, particularly for persons with stroke, spinal cord injury, and traumatic brain injury. In rehabilitation medicine practice, trunk balance is usually divided into sitting or standing positions, and static or dynamic. It is quite common for rehabilitation practitioners to use qualitative descriptions such as poor, fair, and good to quantify trunk balance when assessing and monitoring patients. A non-standard assessment like this will lead to different interpretations and understanding by different team members. Therefore, it is recommended that a precise and objective assessment tool is used to monitor

trunk balance to facilitate group decision-making and identify whether the given interventions are effective.

The Berg balance scale is widely used in rehabilitation practice to assess and train trunk balance. In 2005, a group of researchers from Belgium developed Trunk Impairment Scale or TIS. The TIS measures static and dynamic sitting balance as well as trunk coordination. One interesting feature of TIS is that it points out various compensating movements a patient performs while maintaining a sitting position; therapists who are performing the assessment should be aware of this. Although the TIS was originally developed for stroke patients, some researchers suggested that it could be used in patients with other upper motor neuron lesions. TIS has good reliability, internal consistency, and validity, and is recommended for use for both clinical practice and research. The therapist could learn how to perform TIS by watching instructional video clips which are available online. TIS has been translated into many languages, of which one is the Thai language. In this issue, we present an article on validation and reliability of the Thai version of the TIS version 2.0.

The current issue has interesting and educational articles that could benefit both rehabilitation physicians (physiatrists) and other rehabilitation professionals in their clinical practice and research. I wish you a good read and thank you for your continuous support.

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