

2017 GCMAS Tutorial Proposal

Title: SELECTIVE CONTROL ASSESSMENT OF THE LOWER EXTREMITY (SCALE): A CLINICAL TOOL FOR ASSESSMENT OF SELECTIVE VOLUNTARY MOTOR CONTROL IN PATIENTS WITH SPASTIC CEREBRAL PALSY

Authors/Presenters:

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Purpose: To instruct experienced clinicians in the use and administration of a standardized clinical tool for assessment of selective voluntary motor control (SVMC) of the lower extremity in patients with spastic cerebral palsy (CP) using SCALE (Selective Control Assessment of the Lower Extremity). The reliability and validity of the SCALE has been established (Fowler et. al. *Dev Med Child Neurol* 51:607-614, 2009). The tool and its clinical and research applications will be presented. Participants will have an opportunity to practice scoring patients using videotaped assessments. The use of this tool in clinical decision-making will be discussed.

Intended Audience: Clinicians evaluating patients with CP and individuals conducting research on the clinical or functional characteristics of children and adults with CP

Prerequisite knowledge: A basic understanding of gait kinematics and CP

Abstract: The role of SVMC assessment is often over-looked in the treatment planning of patients with spastic CP. In this tutorial, the role of SVMC in clinical practice and research will be discussed. SCALE administration, including patient positioning, examiner instructions and score sheet, will be explained. The criteria for each SVMC grade will be described, providing participants with the knowledge and skill to independently assess SVMC. Participants will have an opportunity to use SCALE to assess all lower extremity joints on a variety of videotaped patient examples exhibiting a range of SVMC. Discussion and feedback on the participants' skills will be provided. The relationship of SVMC to other impairments such as strength and

spasticity will be presented and the use of SCALE scores in surgical decision making and its role in therapeutic treatment interventions will be discussed.

Learning Objectives:

At the end of the presentation, attendees will be able to:

1. Describe the purpose, content and administration of SCALE for evaluation of SVMC.
2. Describe the scoring system for SCALE.
3. Describe the role of SVMC assessment in clinical decision-making and evidence-based practice.
4. Describe the research supporting the relationship between SVMC and various biomechanical and clinical factors in patients with spastic CP.

Course Outline:

30 minutes: **Introduction/Background**

Overview of SVMC and review of literature on SVMC

Description of SCALE

Validity and reliability

20 minutes: **SCALE Administration**

Administration of the SCALE tool for each joint

Grading criteria for each joint

The SCALE Score Sheet

20 minutes: **Scoring of Videotapes by Participants – Interactive Session**

40 minutes: **Research Applications and Clinical Decision-Making**

10 minutes: **Questions/Discussion**