

## ***"Spasticity in children: From Pathophysiology to Evidence-Based Practice & Management "***

### Summary

Spasticity may result from either diffuse or localized pathology of the cerebral cortex, brain stem, or spinal cord. It is part of the upper motor neuron syndrome and is a commonly encountered condition that when left untreated or undertreated, can have a devastating impact on affected patients. This is especially true in a growing child. Management is complex and often requires a team approach. This seminar/workshop aims to provide a comprehensive discussion on spasticity - its definition and pathophysiology, current available assessment tools for children that may be used both in the clinical and research setting, and the principles in spasticity mgt. A review of the literature on existing evidence regarding medical and surgical interventions, including the role of rehabilitation and exercise will be discussed.

### **Part 1: (125 minutes) :**

Course Director : Dr. Rochelle Dy

1. Definition and Pathophysiology of Spasticity and associated complications  
Speaker : Dr. Du Qing (China)
2. Spasticity Assessment tools  
Speaker : Dr. Desiree Roge (USA)
3. Principles in spasticity management (including goal setting)  
Speaker : Dr. Rochelle Dy (USA)
4. Spasticity Management -Evidence Based Practice: Review relevant updates on all types of current therapy to provide the evidence of each therapy. Botulinum toxin injections, Hippotherapy, Conductive education, electrical therapy, pool therapy, suit therapy, SDR, ITB, Constraint Induced Movement therapy, NDT etc... (e.g. Iona Novak's articles to prepare this topic)

Speaker : Dr. Gessica Della Bella

4. Q&A (20 mins)

Break (15 mins)

**Part 2 (100 minutes)**

Course Director : Dr. Heakyung Kim

1. "Medical/Non-surgical spasticity management"

Speaker : Dr. Doris Valencia (Colombia)

2. "Common spastic/movement patterns in children with CP – commonly affected muscles for chemodenervation (Canada)

Speaker: Dr. David Berbayer (Canada)

Email address: david.berbrayer@sunnybrook.ca

3. Surgical Spasticity Management

To address a) orthopedic surgery-such as single event multi-level surgery (SEMLS), femoral osteotomies, surgeries for leg length discrepancy such as epiphysiodesis, epiphysieal stapling etc..

b.) Intrathecal baclofen pump, c.) Selective Dorsal Rhizotomy

Speaker : Dr. Heakyung Kim (USA)

4. Q & A: 15 mins