

**The Management of Spasticity;  
An Interdisciplinary Approach  
Part I**

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**Outline**

- An Interdisciplinary Approach to Care
- Health Consequences.....Phil May, MD
- Dental Aspects.....Mark Nation, DMD
- Medical Management.....Seth Keller, MD
- Nursing Aspects.....Mary Elizabeth Nelson,  
MSN, RN, APNP
- Panel Discussion

**Health Consequences of Motor  
Dysfunction Encountered In Persons  
with Brain Injury/Dysfunction**

Philip May MD

**Categories of Brain  
Injury/Dysfunction**

1. Childhood Onset Brain Dysfunction  
(developmental disabilities)
2. Young Adult Onset (Traumatic Brain Injury)
3. Older Adult Onset (Aging Related Brain Injury)

**Perspective:  
Causes of Brain Injury/Dysfunction**

1. Genetic
2. Acquired

**Perspective:  
Complications of Brain Injury/Dysfunction**

1. Cognitive dysfunction
2. Motor dysfunction
3. Seizures
4. Behavioral dyscontrol

## Spasticity

- One cause of motor dysfunction
- A motor “syndrome” caused by loss of tonic inhibitory control of the peripheral nervous system, normally exerted by the central nervous system
- Muscles become hyper-reactive to stimuli

## Perspective: Consequences of Motor Dysfunction

1. Pressure sores
2. Contractures/kypho-scoliosis
3. Oropharyngeal dysfunction
4. Esophageal dysfunction (GERD)
5. Gastroparesis (Delayed Gastric Emptying)
6. Duodeno-gastric Reflux (DGR)
7. Constipation
8. Ineffective Airway Clearance
9. Atelectasis
10. Pneumonia
11. Bronchiectasis
12. Interstitial scarring
13. Bone demineralization
14. Fractures
15. Poor Oral Health