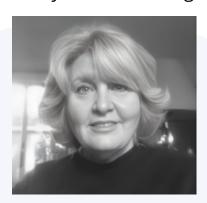


► Beyond Spasticity: My Seven Years of Experience and Outcomes Using Pediatric & Adult Neuromodulation in Private Practice and In SpineX Clinical Trials Part-2

Talk by: Susan Hastings



Neuromodulation Effects

Vision	changes	(within	minutes)	
O NA - 4				

- Motor control and coordination
- O Sensory awareness
- Cognitive function (memory, attention, problem-solving)
- Speech and communication
- Sleep quality
- O Pain reduction

Assessment Techniques

Evaluate multiple systems beyond just motor function:

- O Visual changes (including peripheral vision)
- O Cognitive abilities (memory, executive function)
- \bigcirc Speech and communication skills
- Sleep patterns
- O Pain levels





Clinical Pearls

- Avoid static postures; promote dynamic stability
- Ensure center of mass is properly aligned in activities
- Minimize external forces/handling; allow self-initiated movement
- Pay attention to skin sensory input during interventions
- Combine neuromodulation with skilled therapy guidance for optimal results

Surprising Observations

- Spontaneous emergence of novel motor skills (e.g., drawing, handwriting)
- Rapid improvements in mathematical concept manipulation
- Increased endurance and energy for daily activities
- Development of sense of humor and improved social interaction

Case Studies

1. Dylan (Left Hemiple	egia):
------------------------	--------

O Immediate sensory changes in affected hand
O Improved fine motor control and drawing skills
 Enhanced postural control and functional abilities

2. Saul (Right Hemiplegia):

 Improved balance and coordination on balance boa 	ard
○ Enhanced dual-tasking abilities	
 Increased affect and engagement in activities 	

3. Casey (Unspecified Diagnosis):

\bigcirc F	Reduced knee pain
\bigcirc I	mproved gait pattern
\bigcirc E	nhanced verbal fluency and communication





Clinical Implications

- Effects of neuromodulation may persist beyond treatment sessions
- Combine neuromodulation with targeted activities for optimal results
- Monitor progress across multiple domains, not just motor function
- Be prepared for rapid and sometimes unexpected improvements
- Consistent use and proper application are crucial for long-term benefits

Cautions

- Improper use or lack of guidance may lead to extinction of newly emerged skills
- Avoid reinforcing abnormal movement patterns during neuromodulation
- Consider long-term consequences of intervention choices

Link to Video

NOTES

