MUSCULOSKELETAL EXAMINATION OF THE CHILD WITH CP AND SCI

The clinician can monitor for (and describe) the more common orthopedic complications of cerebral palsy using a brief head-to-toe approach.

HEAD CONTROL:

- Good head control
- Moderate head control (drops head intermittently)
- Poor head control (maintains upright only briefly)

SITTING POSTURE:

- Sits with trunk erect
- Trunk rounded, occasionally use of hands for support
- Requires use of hands to maintain upright
- Unable to sit unsupported

UPPER EXTREMITY MONITORING

EXTREMITY MOVEMENT:	*SCORE*		*DESCRIPTION*
	RIGHT	LEFT	0 = full range 1 = limited range 2 = severely limited
Elbow extension			
Supination			
Wrist extension			
Thumb abduction			
Thumb extension			
Finger extension			
Grasps large object			Yes or No
Pincher grasp			Yes or No

FUNCTION:

FUNCTION:	*INDEPENDENT*	*REQUIRES SOME ASSISTANCE*	*REQUIRES COMPLETE ASSISTANCE*
Dressing			
Feeding			

BACK:

- Straight
- Suspect Spinal Curvature
- Spinal Curvature

LOWER EXTREMITY MONITORING:

MOVEMENT:	*RIGHT*	*LEFT*	*NORMAL*	*LIMITATION DESCRIPTION*
Ankle dorsiflexion with knee straight			20-30 degrees above neutral	Limitation indicates soleus and gastrocnemius contracture
Ankle dorsiflexion with knee bent			20-30 degrees above neutral	Limitations indicate soleus and gastrocnemius contracture
Hip abduction in frogleg			Symmetric, 60 degrees	Asymmetry raises concern for hip subluxation/dislocation
Popliteal angle in supine			15-20 degrees from full extension	Measure degrees from full extension. Limitation indicates hamstring contracture
Leg length discrepancy in supine				Discrepancy can be due to hip dislocation, contracture ("apparent discrepancy") and prior surgery

AMBULATORY STATUS:

- Community ambulatory
- Household ambulatory
- Nonfunctional ambulatory (e.g., therapy only)
- Non-ambulatory

GAIT

- □ ***with/without braces*** _____
- □ ***with/without assistive device*** _____

Observations:

- Unstable
- Asymmetric or uncoordinated arm swing
- Exaggerated truncal sway/pelvic drop
- Pelvic obliquity, retraction, or anterior tilt
- Crouch
- Hyperextension at the knee
- In/out toeing
- Equinus
- Ankle pronation
- Other foot/ankle deformity
- Impaired foot clearance

All children should be referred to an orthopedist or physiatrist for musculoskeletal monitoring throughout childhood. Indications for immediate referral or reassessment by a musculoskeletal specialist include:

- Patients with new or significant advancement in contracture
- Patients with significant change in hip exam
- Patients with new onset or significant change in scoliosis
- Inefficient gait which has not been evaluated orthopedically
- Poor sitting posture with no intervention