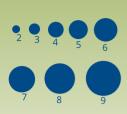


Brain Injury AssessmentsAcute Care



PUPIL REACTION

Nr - Nonreactive BR - Brisk SL - Sluggish CO - Constricted

GLASGOW COMA SCALE				
Eyes Open	Spontaneous To Speech To Pain None	4 3 2 1		
Best Verbal Response	Oriented Confused Inappropriate Incomprehensible None	5 4 3 2 1		
Best Motor Response Command Localizes Pain Withdraws Flexes Pain Extends to Pain None		6 5 4 3 2		

CLASSIFICATION OF BRAIN INJURY					
Mild	LOC less than 30 minutes GCS 13-15		PTA less than 24 hours		
Moderate	LOC greater than 30 minutes, but less than 24 hours GCS 9-12		PTA 24 hours to 7 days		
Severe	LOC greater than 24 hours	GCS 8 or less	PTA more than 7 days		

LOC - loss of consciousness; GCS - Glasgow Coma Score;

PTA - Post-traumatic amnesia

Comparison of Coma, Vegetative State, and Minimally Conscious State						
	Coma	Vegetative State	Minimally Conscious State			
Eye Opening	No	Yes	Yes			
Sleep/Wake Cycles	No	Yes	Yes			
Visual Tracking	No	No	Often			
Object Recognition	No	No	Inconsistent			
Command	No	No	Inconsistent			
Communication	No	No	Inconsistent			
Contingent Emotion	No	No	Inconsistent			

Source: NIDRR 2007 Consciousness Consortium



Brain Injury RehabilitationAssessments & Interventions

LEVEL 1 - (No Response)

Unresponsive to touch, pain, auditory or verbal stimuli.

LEVEL 2 - (Generalized)

Inconsistent, non-purposeful responses and/or reactions to painful stimuli.

LEVEL 3 - (Localized Response)

Inconsistent reaction directly related to type of stimulus presented (e.g., touch, pain, auditory or verbal).

LEVEL 4 - (Confused, Agitated)

Disoriented and unaware of present events with frequent inappropriate behavior (e.g., may yell, hit or bite); attention span is short and ability to process information is significantly impaired.

LEVEL 5 - (Confused, Inappropriate, Non-agitated)

Non-purposeful, random or fragmented responses when asked to do tasks that may be difficult; patient appears alert and responds to simple commands; performs previously learned tasks, but is unable to learn new ones.

LEVEL 6 - (Confused, Appropriate)

Behavior is goal-directed; responses are appropriate to the situation with incorrect responses because of memory difficulties.

LEVEL 7 - (Automatic, Appropriate)

Correct routine responses that are robot-like; appears oriented to setting, but insight, judgment and problem-solving are poor.

LEVEL 8 - (Purposeful, Appropriate)

Correct responses, carryover of new learning; poor tolerance for stress; some abstract reasoning difficulties. Insight, judgment and problem-solving require minimum assist to supervision.

LEVEL 9 - (Purposeful, Appropriate)

Able to shift attention and use memory aids. Insight, judgment, problem-solving and self-monitoring require standby assistance.

LEVEL 10 - (Purposeful, Appropriate)

Independently uses strategies, if needed, for memory, attention, judgment, problem-solving and self-monitoring. Aware of strengths and weaknesses.

Early Interventions to Prepare Patient for Rehabilitation

- ROM/positioning (PT, OT)
- Tone management
- Nutritional optimization
- Pulmonary optimization
- Dysautonomia management
- Neuroendocrine assessment
- Swallowing/dysphagia (ST)
- Restriction of overstimulation/noiseLimitation of narcotic/sedating
- medications
 Promotion of good sleep/wake cycle

For more information, visit: www.myshepherdconnection.org

MAKE A REFERRAL

Contact Shepherd Center's admissions team to make a referral for patients with a spinal cord injury, brain injury, stroke or neuromuscular diagnosis.

Visit **shepherd.org/admissions** for more information or call our admissions department at **404-352-2020**.