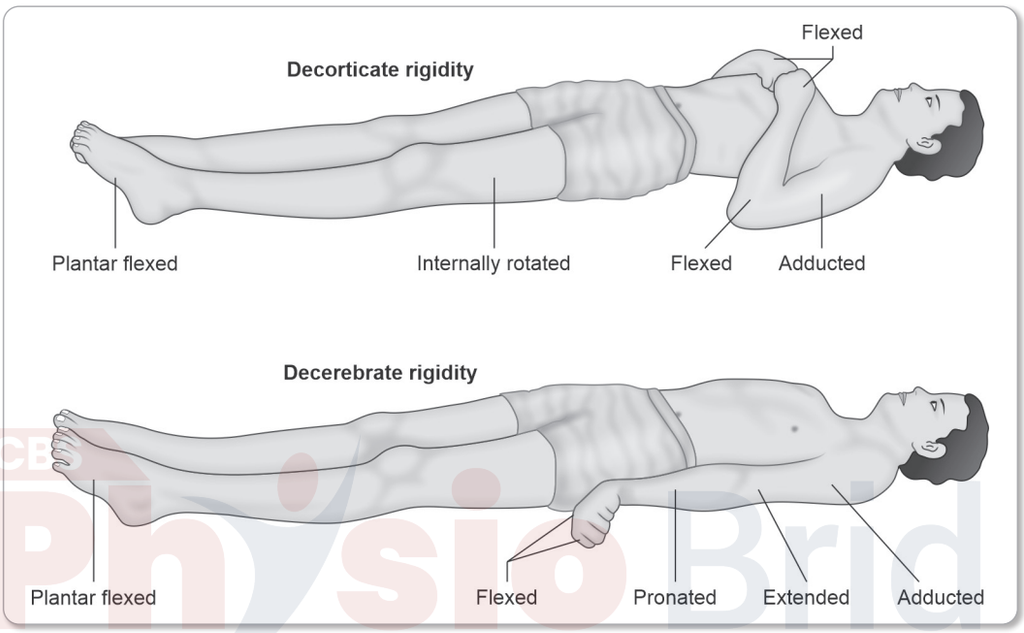
- **Decorticate and decerebrate rigidity:** Severe brain injury can result in coma with decorticate and decerebrate rigidity.

Decorticate rigidity	Decerebrate rigidity
It refers to sustained contraction and posturing of the upper limbs in flexion and lower limbs in extension.	It refers to sustained contraction and posturing of trunk and limbs in a position of full extension.



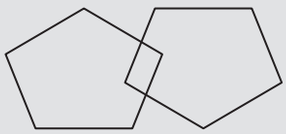
On Palpation

- **Vital signs:**
  - **Temperature:** Normal range is between 36.5°C-37.5°C (98-100°F)
  - **Blood pressure:** Normal range is 120/80 mm Hg
  - **Heart rate:** Normal range is between 60–100 beats/min
  - **Respiratory rate:**
    - Adult normal range is 12–18 breaths/min
    - Older adult normal range is 12–20 breaths/min
- **Tone:** Flaccid/spastic
- **Spasm:** Present/Absent
- **Scar:** Mobile/immobile
- **Tenderness:** _____

Grades of Tenderness

Grade	Description
Grade 1	Patient complains of pain
Grade 2	Patient complains of pain and winces
Grade 3	Patient complains of winces and withdraws
Grade 4	Patient will not allow palpation

- **Edema:** Pitting/Nonpitting

Maximum score	Patient's score	Questions
1		'Please copy this picture.' (The examiner gives the patient a blank piece of paper and asks him/her to draw the symbol below. All 10 angles must be present and two must intersect.) 
30		**TOTAL**

Interpretation

Score	Description
24–30	No cognitive impairment
18–23	Mild cognitive impairment
0–17	Severe cognitive impairment

Perception Examination

- **Body scheme and body image disorders:**
  - Unilateral neglect
  - Somatagnosia
  - Left-right discrimination
  - Finger agnosia
  - Anosognosia
- **Spatial relation disorders:**
  - Finger—ground discrimination
  - Form discrimination
  - Spatial relation
  - Position in space
  - Topographic disorders
  - Depth and distance perception
  - Vertical disorientation
- **Agnosia:**
  - Visual object agnosia
  - Auditory agnosia
  - Tactile agnosia
- **Apraxia:**
  - Ideomotor apraxia: _____
  - Ideational apraxia: _____
  - Constructional apraxia: _____

Cranial Nerve Examination

Number	Name	Assessment
I	Olfactory nerve	
II	Optic nerve	
III	Oculomotor nerve	
IV	Trochlear nerve	

Contd...

Grading for Sensory Examination

Grade	Description
0	Absent, no response
1	Decreased, delayed response
2	Increased, exaggerated response
3	Inconsistent response
4	Intact, normal response

Motor Examination

- **Muscle tone:**_____

Modified Ashworth Scale for Grading Spasticity

Grade	Description
0	No increase in muscle tone
1	Slight increase in muscle tone, manifested by a catch and release or by minimal resistance at the end of the ROM when the affected part(s) is moved in flexion or extension.
1+	Slight increase in muscle tone, manifested by catch, followed by minimal resistance throughout the remainder (less than half) of the ROM
2	More marked increase in muscle tone, through most of the ROM but affected parts(s) can be easily moved.
3	Considerable increase in muscle tone, passive movement difficulty.
4	Affected part(s) rigid in flexion or extension.

- **Range of motion assessment:** _____
- **MMT/VMC:** _____

Voluntary Control Grading

Grade	Description
0	No movement is possible
1	Initiation of movement or flicker of contraction
2	Movement in initial half ROM in mass pattern
3	Movement in full ROM but in mass pattern
4	Movement in initial half range in isolation and later half in pattern
5	Full ROM in isolation but goes in pattern when resisted
6	Full ROM in isolation and can take resistance without developing pattern

- **Limb length:**
  - True: _____
  - Apparent:_____
- **Tightness and contracture:**_____
- **Girth measurement:** _____

- **Passive ROM (PROM):**
  - Examiner-initiated movement
  - Joint mobility without muscle contraction
  - **End-feel assessment:** Capsular (firm, leathery), Bony (hard, abrupt), Soft tissue (soft, gradual), Muscle spasm (sudden, hard stop with pain), Empty (no mechanical resistance, pain limits movement)

Range of Joint Motion Evaluation Chart

Joint/Movement	Left			Right			Remarks
	Active ROM	Passive ROM	End feel	Active ROM	Passive ROM	End feel	
Shoulder flexion							
Shoulder extension							
Shoulder abduction							
Shoulder ER							
Shoulder IR							

Normal and Abnormal Joint End-Feel

End- feel type	Description	Normal end-feel structure	Abnormal end-feel cause
Soft	Soft, mushy feel due to soft tissue compression.	Soft tissue approximation (e.g., knee flexion, elbow flexion)	Edema or synovitis (occurs earlier than expected in ROM)
Firm	A 'springy' or 'leathery' feel with elastic resistance.	Muscular stretch (e.g., hip flexion with knee straight)	Increased muscle tone or shortening of muscle, capsule or ligament
		Capsular stretch (e.g., MCP joint extension)	Capsular shortening (e.g., frozen shoulder)
		Ligamentous stretch (e.g., forearm supination)	Ligamentous shortening
Hard	Abrupt, unyielding sensation when bone meets bone.	Bone contacting bone (e.g., elbow extension)	Loose bodies in joint, osteoarthritis (osteophytes), myositis ossificans or fracture
Springy block	Rebound or springy sensation, usually occurs before the expected end of ROM in a non-capsular pattern.	N/A (Always abnormal)	Internal derangement (e.g., meniscal tear, loose cartilage)
Empty	Movement stops due to pain, but the examiner feels no mechanical resistance.	N/A (Always abnormal)	Acute joint inflammation, bursitis, abscess or fracture (patient prevents further movement)
Muscle spasm	Sudden, hard, dramatic arrest of movement often accompanied by pain; a reflexive protective muscle guarding.	N/A (Always abnormal)	Acute joint injury or inflammation

Manual Muscle Testing

- Evaluates strength of individual muscles or muscle groups
- Examiner applies resistance against patient's voluntary contraction

Manual Muscle Testing (MMT) [Medical Research Council (MRC) Scale]

Grade	Description
Grade 0	No visible/palpable contraction
Grade 1	Visible/palpable contraction, no movement
Grade 2	Full ROM with gravity eliminated
Grade 3	Full ROM against gravity
Grade 4	Full ROM against gravity + some resistance
Grade 5	Full ROM against gravity + full resistance

Reflex Testing

- **Jaw jerk:** _____
- **Biceps:** _____
- **Brachioradialis:** _____
- **Triceps:** _____
- **Quadriceps:** _____
- **Ankle jerk:** _____

Deep Tendon Reflex (DTR) Grading

Grade	Description
0	Absent reflex
1+ or +	Diminished reflex
2+ or ++	Normal reflex
3+ or +++	Brisk reflex
4+ or ++++	Hyperactive with clonus

Functional Examination

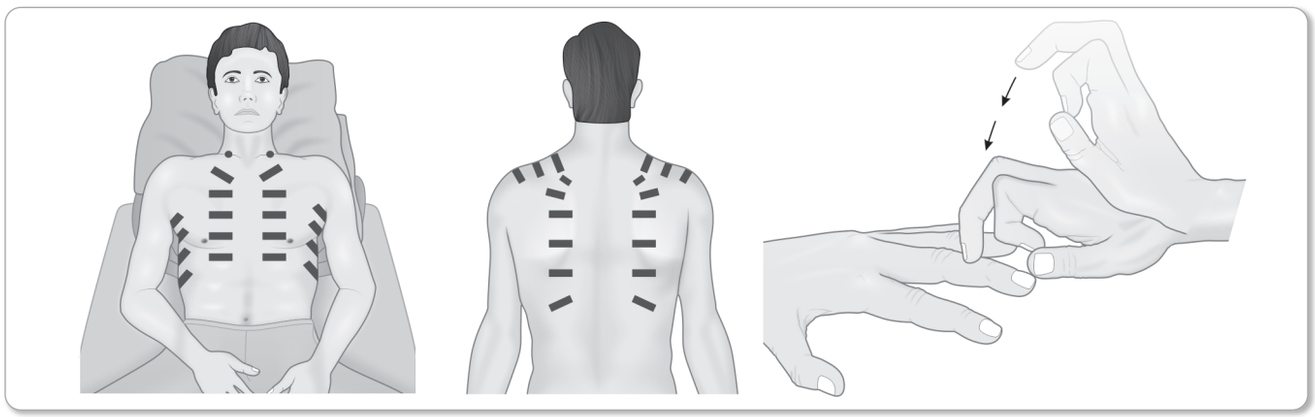
- **Balance examination**
  - Static balance testing
  - Dynamic balance testing
- **Gait examination**
  - Observational gait analysis:_____
- **Functional status and scales**

Specific Tests

_____

_____

_____

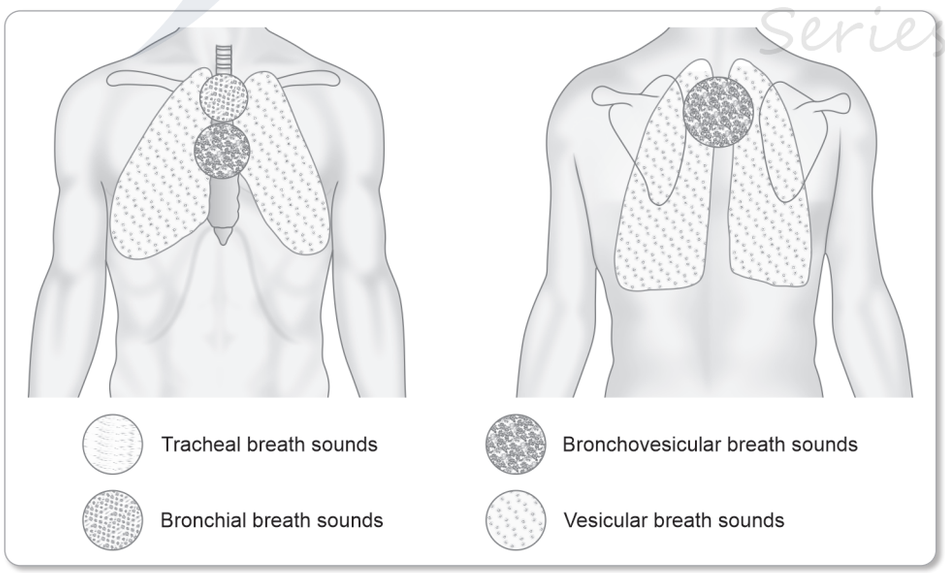


Region	Right	Left
Upper zone	Resonant	Resonant
Middle zone	Resonant	Resonant
Lower zone	Resonant	Cardiac dullness

Auscultation

Breath Sounds

1. Normal breath sound
2. Abnormal breath sound
3. Adventitious breath sound



1. Normal Breath Sound

- Bronchial
  - High-pitched and loud intensity
  - Hollow quality
  - Louder on expiration

Pain Examination

- **Neonatal infant pain scale:** _____
- **Face scale rating for children:** _____

Wong-Baker faces pain rating scale

	0	1	2	3	4	5
Alternate coding:	No hurt 0	Hurts little bit 2	Hurts little more 4	Hurts even more 6	Hurts whole lot 8	Hurts worst 10

Gait Examination

- **Step width:** _____
- **Step length:** _____
- **Stride length:** _____
- **Cadence:** _____

Coordination Examination

- **Equilibrium tests:** Upper limb _____ Lower limb _____
- **Nonequilibrium tests:** Upper limb _____ Lower limb _____

Balance Examination

- **Functional Balance Scale score:** _____
- **Pediatric Balance Scale (PBS) score:** _____

Functional Examination

- **WeeFIM score:** _____
- **Bowel and bladder function:** _____

Investigations

_____

_____

_____

Pain Examination

- **Neonatal infant pain scale:** _____
- **Face scale rating for children:** _____

Wong-Baker faces pain rating scale

Alternate coding:	0 No hurt 0	1 Hurts little bit 2	2 Hurts little more 4	3 Hurts even more 6	4 Hurts whole lot 8	5 Hurts worst 10

Gait Examination

- **Step width:** _____
- **Step length:** _____
- **Stride length:** _____
- **Cadence:** _____

Coordination Examination

- **Equilibrium tests:** Upper limb _____ Lower limb _____
- **Nonequilibrium tests:** Upper limb _____ Lower limb _____

Balance Examination

- **Functional Balance Scale score:** _____
- **Pediatric Balance Scale (PBS) score:** _____

Functional Examination

- **WeeFIM score:** _____
- **Bowel and bladder function:** _____

Investigations

_____

_____

_____

- **Combined cortical sensations:**
  - Stereognosis perception: _____
  - Tactile perception: _____
  - Two-point discrimination: _____
  - Double simultaneous stimulation: _____
  - Graphesthesia (traced figure identification): _____
  - Stereognosis (recognition of texture): _____
  - Barognosis (recognition of weight): _____

Motor Examination

- **Muscle tone:**_____
- **Range of motion:**

Joint/Movement	Left			Right			Remarks
	Active ROM	Passive ROM	End feel	Active ROM	Passive ROM	End feel	

- **MMT/VMC:**

Left			Movement	Right		
3	2	1	Upper limb	1	2	3

Contd...

- **Combined cortical sensations:**
  - Stereognosis perception: _____
  - Tactile perception: _____
  - Two-point discrimination: _____
  - Double simultaneous stimulation: _____
  - Graphesthesia (traced figure identification): _____
  - Stereognosis (recognition of texture): _____
  - Barognosis (recognition of weight): _____

Motor Examination

- **Muscle tone:**_____
- **Range of motion:**

Joint/Movement	Left			Right			Remarks
	Active ROM	Passive ROM	End feel	Active ROM	Passive ROM	End feel	

- **MMT/VMC:**

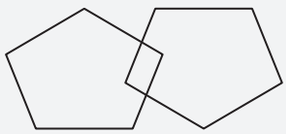
Left			Movement	Right		
3	2	1	Upper limb	1	2	3

Contd...

Mini-Mental State Examination (MMSE)

Patient's Name:_____ **Date:** _____

Instructions: Score one point for each correct response within each question or activity.

Maximum score	Patient's score	Questions
5		"What is the year? Season? Date? Day? Month?"
5		"Where are we now? State? Country? Town/city? Hospital? Floor?"
3		The examiner names three unrelated objects clearly and slowly, then the instructor asks the patient to name all three of them. The patient's response is used for scoring. The examiner repeats them until patient learns all of them, if possible.
5		"I would like you to count backward from 100 by sevens." (93, 86, 79, 72, 65, ...) Alternative: "Spell WORLD backwards." (D-L-R-O-W)
3		"Earlier I told you the names of three things. Can you tell me what those were?"
2		Show the patient two simple objects, such as a wristwatch and a pencil, and ask the patient to name them.
1		Repeat the phrase: 'No ifs, ands or buts.'
3		"Take the paper in your right hand, fold it in half, and put it on the floor." (The examiner gives the patient a piece of blank paper.)
1		"Please read this and do what it says." (Written instruction is "Close your eyes.")
1		"Make up and write a sentence about anything." (This sentence must contain a noun and a verb.)
1		"Please copy this picture." (The examiner gives the patient a blank piece of paper and asks him/her to draw the symbol below. All 10 angles must be present and two must intersect.) 
30		**TOTAL**

Perception Examination

- **Body scheme and body image disorders:**
  - Unilateral neglect
  - Somatagnosia
  - Left-right discrimination
  - Finger agnosia
  - Anosognosia
- **Spatial relation disorders:**
  - Finger—ground discrimination
  - Form discrimination
  - Spatial relation
  - Position in space
  - Topographic disorders
  - Depth and distance perception
  - Vertical disorientation

- **Higher function assessment:** (if applicable) _____
- **Cranial nerve examination:** (if applicable) _____
- **Sensory assessment:** (if applicable) _____
- **Motor assessment:**
  - ROM: _____
  - MMT: _____
  - Tightness: _____
  - Chest expansion: _____
- **Stump examination:** (for amputation)
  - **Disability:** Temporary/permanent (if applicable)
    - Percentage (%) of disability
    - Prosthesis/orthosis is used or not?
  - Girth measurement: _____
  - Limb length discrepancy—structural or functional (if applicable): _____
- **Balance examination:** _____
- **ENT examination:** _____
- **Burns examination:** _____