

Weesner Prep Neuro Exam:

Mental Status: 2 components psychiatric and neurologic

Psychiatric component- Affect, Mood and Thought

Affect: The outward showing of feeling

Mood: Their own perception of how they are feeling

Thought: What are they thinking and can their process be followed

Neurologic component- Consciousness, Language, Memory, Visio-Spatial Skills

Level of consciousness and orientation.

Language (receptive, expressive, naming, repetition)

Attention and Concentration (serial 7s are evil! Months of year backwards)

Memory. Pick your own three items you will not forget!

Arithmetic

Spatial Skills (clock, drawing)

Abstraction

MOCA, MMSE, Kokmen

Cranial Nerves:

Nerve	Function	Exam Maneuver	Positive Finding
CN1	Olfaction	Occlude each nostril test for smell	Unable to smell
CN 2	Visual acuity	Snellen Chart	
CN3	Controls all eye movement except lateral rectus and superior oblique	Check Extraocular movements and convergence	
CN4	Controls Superior Oblique	Moves eye down and in	
CN 5	Sensory: face via ophthalmic, maxillary and mandibular Motor: temporal and masseter muscles		
CN 6	Motor to lateral rectus	Moves eye laterally	

CN 7	Motor to facial muscles and taste to anterior tongue	Ask patient to blow, whistle and frown	
CN 8	Hearing and balance		
CN 9	Sensory and motor to pharynx and posterior tongue		
CN 10	Motor to palate, larynx, pharynx. Sensory to pharynx and larynx		
CN 11	Motor: Sternocleidomastoid and trapezius		
CN 12	Motor to Tongue		

Location	Field Defect		Comment
	Left Eye	Right Eye	
1 Left Optic Nerve	<input type="radio"/>	<input type="radio"/>	
2 Chiasm	<input type="radio"/>	<input type="radio"/>	
3 Right Optic Tract	<input type="radio"/>	<input type="radio"/>	
4 Left Lateral Geniculate Nucleus	<input type="radio"/>	<input type="radio"/>	
5 Left Temporal Lobe	<input type="radio"/>	<input type="radio"/>	
6 Left Parietal Lobe	<input type="radio"/>	<input type="radio"/>	
7 Left Occipital Lobe (upper bank)	<input type="radio"/>	<input type="radio"/>	
8 Left Occipital Lobe (lower bank)	<input type="radio"/>	<input type="radio"/>	
9 Right Occipital Lobe	<input type="radio"/>	<input type="radio"/>	

Motor Exam:

Check motor strength: 5 point scale.

5 = normal

4 = against gravity with resistance

3= against gravity, no resistance

2= can move joint fully but not against gravity

1= muscle moves but no movement over joint

0= no movement

Spasticity:

- Cog wheel is related to velocity
- Lead pipe is difficult to move all the time

Muscle Atrophy:

- Check in smaller muscles such as hands or feet

Sensory Exam:

Check dorsal column system (joint position sense, light touch, vibration) with joint position sense at toes and with vibratory sense at toes.

Check spinothalamic system (pain and temperature) with pin prick at toes, feet, shin for sensory gradient, then sidedness. Check hands in dermatomal and distal pattern.

Check cortical signs: two point discrimination; touch localization; graphesthesia, stereognosis, and position sense on skin

Deep Tendon Reflexes:

Arms: biceps (C5/6), triceps (C6/7), brachioradialis (C5/6)

Legs: quadriceps (L2,3,4), Achilles (S1)

Scale: 0-4

0= Nothing

1= Response, but not full

2= Good movement over one joint

3= Movement over two joints

4= Clonus sustained

Check for the Babinski response. Stroke lateral edge of foot, not middle of sole.

Coordination/Cerebellar

Check finger-nose-finger, and toe-finger tests.

Check for action tremor, postural tremor, and resting tremor.

Check for truncal ataxia (watch patient sitting up without arms)

Gait and station:

Watch the patient walk down the hall. 4 feet is not enough. Watch stride length, arm swing. Watch for shuffling, scuffling, foot drop/steppage, and for spasticity.

Observe the patient's stability of station with eyes open and closed (Romberg).

Watch toe walking, heel walking, and tandem walking.

Type of gait	Description	Associated signs	Causes
Antalgic	Limited range of motion; limping; slow and short steps; unable to bear full weight	Pain worsening with movement and weight bearing	Degenerative joint disease; trauma
Cautious	Arms and legs abducted; careful; en bloc turns; like walking on ice; slow; wide-based	Associated with anxiety, fear of falling, or open spaces	Deconditioning; post-fall syndrome; visual impairment
Cerebellar ataxia	Staggering; wide-based	Dysarthria; dysdiadochokinesia; dysmetria; impaired check; intention tremor; nystagmus; postural instability; rebound; Romberg sign present; titubation	Cerebellar degeneration; drug or alcohol intoxication; multiple sclerosis; stroke; thiamine and vitamin B ₁₂ deficiency
Choreic	Dance-like; irregular; slow; spontaneous knee flexion and leg rising; wide-based	Choreoathetotic movements of upper extremities	Huntington disease; levodopa-induced dyskinesia
Dystonic	Abnormal posture of foot or leg; distorted gait; foot dragging; hyperflexion of hips	Worse with the action of walking; may improve when walking backward	—
Frontal gait disorder (gait apraxia)	Magnetic; start and turn hesitation; freezing; marche petits pas	Dementia; frontal lobe signs; incontinence	Frontal lobe degeneration; multi-infarct state; normal-pressure hydrocephalus
Hemiparetic	Extension and circumduction of weak and spastic limb; flexed arm	Extensor plantar response; face, arm, and leg weakness; hyperreflexia	Hemispheric or brainstem lesion
Paraparetic	Adduction; extension; scissoring of both legs; stiffness	Bilateral leg weakness; extensor plantar response; hyperreflexia; spasticity	Spinal cord or bilateral cerebral lesions
Parkinsonian	Short-stepped; shuffling; hips, knees, and spine flexed; festination; en bloc turns	Bradykinesia; muscular rigidity; postural instability; reduced arm swing; rest tremor	Parkinson disease; atypical or secondary forms of parkinsonism
Psychogenic	Astasia-abasia; bizarre and nonphysiologic gait; lurching; rare fall or injury	Absence of objective neurologic signs; give-way weakness	Factitious, somatoform disorders or malingering
Sensory ataxia	Unsteady; worse without visual input, particularly at night	Distal sensory loss; impaired position and vibratory sensation; Romberg sign present	Dorsal column dysfunction; neuropathy; sensory neuropathy
Steppage	Resulting from footdrop; excessive flexion of hips and knees when walking; short strides; slapping quality; tripping	Atrophy of distal leg muscles; distal sensory loss and weakness footdrop; loss of ankle jerk	Motor neuropathy
Vestibular ataxia	Unsteady; falling to one side; postural instability	Nausea; normal sensation, reflexes, and strength; nystagmus; vertigo	Acute labyrinthitis; Meniere disease
Waddling	Lumbar lordosis; swaying; symmetric; toe walk; wide-based	Hip dislocation; proximal muscle weakness of lower extremities; use arms to get up from chair	Muscular dystrophy; myopathy

Adapted with permission from Zawora M, Liang T-W, Jarra H. Neurological problems in the elderly. In: Arenson C, Busby-Whitehead J, Brummel-Smith K, O'Brien JG, Palmer MH, Reichel W, eds. *Reichel's Care of the Elderly: Clinical Aspects of Aging*. 6th ed. New York, NY: Cambridge University Press; 2009:143.