

Neurological Examination

| Introduction | |
|---|---------------------------------------|
| Wash your hands and wear PPE if appropriate | |
| Introduce yourself to the patient including your name and role | |
| Confirm the patient's name and date of birth | |
| Briefly explain what the examination will involve using patient-friendly language | |
| Gain consent to proceed with the examination | |
| The patient should be in sitting or supine position | |
| Ask if the patient has any pain before proceeding | |
| Higher centers examination | |
| General inspection: Obvious cranial nerve or limb lesions. Ask patient about right- or left-handedness, level of education. Shake hands. | |
| Orientation Time, Place & Person. | |
| Speech (simple to complex): Comprehension, Repetition, Name objects (nominal dysphasia) Describe a picture. | |
| Parietal lobes Dominant (Gerstmann's syndrome), Acalculia (mental arithmetic), Agraphia (write), Left-right disorientation, Finger agnosia (name fingers) Non-dominant, Dressing apraxia, Sensory inattention, Visual inattention, Cortical sensory loss (loss of graphaesthesia, two-point discrimination, joint position sense and stereognosis), Constructional apraxia | |
| Memory (temporal lobe) Short term (e.g. 3–5 words) Long term | |
| Frontal lobe Reflexes: Grasp reflex; palmar, plantar. Pout and snout reflex. mental proverb interpretation test. | |
| Smell. | |
| Fundi. | |
| Gait. | |
| Neck stiffness and Kernig's sign | |
| Cranial nerves | |
| II | Visual acuity and fields; fundoscopy. |
| III, IV, VI | Pupils and eye movements |
| V | Corneal reflexes, jaw jerk |
| VII | Facial muscles |
| VIII | Hearing |
| IX, X | Palate and gag |
| XI | Trapezius and sternocleidomastoids |
| XII | Tongue |
| Upper limbs examination | |
| General inspection (patient sitting to begin with); Scars, Skin (e.g. neurofibroma, café-au-lait), Abnormal movements. | |
| Shake hands | |
| Motor system: | |
| Inspection: arms, shoulder girdle—extend both arms; wasting, fasciculation, tremor, drift. | |
| Palpation: Muscle bulk, Muscle tenderness. | |
| Tone: Wrist, Elbow. | |
| Power: Shoulder, Elbow, Wrist, Fingers, Ulnar (median nerve function) | |

Reflexes: Biceps, Triceps, Supinator.
Coordination: Finger–nose test—intention tremor, Past-pointing, Dysdiadochokinesis, Rebound.

Sensory system:

Pain: pinprick.
Cold: use tuning fork or tendon hammer end.
Vibration: 128 Hz tuning fork.
Proprioception: distal interphalangeal joint (each hand)
± Light touch: cottonwool.

Lower limb examination

General inspection (patient in supine position); Scars, Skin (e.g. neurofibroma, café-au-lait), Abnormal movements, Urinary catheter.

Gait

Motor system :

Inspection: lower limbs, wasting, fasciculation, tremor.
Palpation: Muscle bulk, Muscle tenderness.
Tone: Knee and Ankle -test for clonus-
Power: Hip, Knee, Ankle, and Foot.
Reflexes: Knee, Ankle, Plantar.
Coordination: Heel-Shin test, Toe-Finger test, Foot-tapping test.

Sensory system:

Pain: pinprick.
Cold: use tuning fork or tendon hammer end.
Vibration: 128 Hz tuning fork.
Proprioception.
± Light touch: cottonwool.

Saddle region sensation.

Anal reflex.

Back; deformity, scars, tenderness.

After examination

Ensure patient comfort, cover and thank the patient.

Provide explanations, address questions, and discuss the management plan with the patient.

Dispose of waste material following infection control standards.

Do not forget to wash your hands.

Reference: Talley, N. J., & O'Connor, S. Clinical Examination: A Systematic Guide to Physicians Diagnosis, 9th Edition.

