

DEPARTMENT OF PHYSIOTHERAPY

COURSE NAME : BPT

COURSE FACULTY : EZHILARASU T

QUESTION BANK

UNIT II – Assessment in Neurology

Puzzle 1: The Forgotten Path

Neurology intern Sophia Reyes takes history from Mr. Alvarez, 70, who seems disoriented to time. Assessment of higher mental function: orientation, memory via recall tests. He struggles with recent events, possibly hippocampal involvement. In busy clinic, balance thoroughness with time.

Possible next steps:

1. Mini-Mental State Exam.
2. Detailed memory tasks.
3. Neuroimaging referral.
4. Family collateral history.

Structured reasoning: Accuracy in function assessment; efficiency key; no urgency unless acute; resources like family; short-term vs. long-term cognition; ethical privacy.

Puzzle 2: The Silent Echo

Student Ben Fowler assesses Ms. Chen for aphasia post-stroke. Language: Broca vs. Wernicke areas. Speech fluent but nonsensical. Cranial nerve VII intact for articulation.

Possible hypotheses:

1. Receptive aphasia from temporal lesion.
2. Expressive from frontal.
3. Global aphasia.
4. Apraxia of speech.

Structured reasoning: Assessment accuracy; clinic efficiency; urgency low; resources; outcomes; ethical communication aids.

Puzzle 3: The Hidden Weakness

Junior clinician Isla Grant tests motor power in Mr. Thompson's limbs. Grade 4/5 left arm, pronator drift. Tone increased.

Possible next steps:

1. Full MRC grading.
2. Reflex testing.
3. Functional tasks.
4. EMG request.

Structured reasoning: Power accuracy; safety in weakness; efficiency; resources; functional outcomes; ethics.

Puzzle 4: The Numb Veil

Intern Carlos Mendes assesses sensory function in Ms. Lopez: touch diminished right leg, position sense intact. Pain threshold altered.

Possible hypotheses:

1. Spinothalamic deficit.
2. Dorsal column involvement.
3. Cortical sensory neglect.
4. Peripheral stocking loss.

Structured reasoning: Sensory accuracy; efficiency; urgency if acute; resources; long-term sensation; ethical explanation.

Puzzle 5: The Stiff Shadow

Clinician Aria Singh evaluates tone in Mr. Patel: spasticity in legs, clasp-knife. Rigidity absent.

Possible next steps:

1. Modified Ashworth scale.
2. Passive range testing.
3. Gait observation.
4. Baclofen trial consideration.

Structured reasoning: Tone accuracy; safety mobility; efficiency; resources; outcomes; ethics in discomfort.

Puzzle 6: The Dizzy Turn

Student Zoe Kim assesses cerebellar function in Ms. Reed: dysmetria on finger-nose, intention tremor.

Possible hypotheses:

1. Ipsilateral cerebellar hemisphere lesion.
2. Midline vermis ataxia.
3. Brainstem involvement.
4. Sensory ataxia mimic.

Structured reasoning: Function accuracy; efficiency; fall safety; resources; balance outcomes; ethics.

Puzzle 7: The Lost Gesture

Intern Liam Harper tests for apraxia in Mr. Wu: unable to mime brushing teeth despite understanding.

Possible next steps:

1. Ideomotor apraxia tasks.
2. Cortical sensory exam.
3. MRI parietal lobe.
4. Occupational therapy consult.

Structured reasoning: Higher function accuracy; efficiency; no urgency; resources; functional outcomes; ethical independence.

Puzzle 8: The Uneven Step

Junior clinician Maya Torres observes gait in Mrs. Gomez: festinating, small steps.

Possible hypotheses:

1. Parkinsonian gait.
2. Cerebellar wide-base.
3. Sensory ataxic stomp.
4. Hemiparetic circumduction.

Structured reasoning: Gait accuracy; safety falls; efficiency; resources; long-term mobility; ethics.

Puzzle 9: The Asymmetric Arc

Student Ethan Nash checks reflexes: hyperreflexia left side, Babinski positive.

Possible next steps:

1. Full reflex panel.
2. Tone correlation.
3. Spinal MRI.
4. Clonus testing.

Structured reasoning: Reflex accuracy; efficiency; urgency cord; resources; outcomes; ethics.

Puzzle 10: The Fading Focus

Clinician Nora Hale assesses attention in Ms. Diaz: distractible, poor digit span.

Possible hypotheses:

1. Frontal lobe dysfunction.
2. Delirium from infection.
3. ADHD mimic.
4. Anxiety interference.

Structured reasoning: Mental accuracy; efficiency; urgency delirium; resources; cognitive outcomes; ethical.

Answers for UNIT II

1. **Best next step:** 1 – Efficiency and accuracy in standardized tool; ethical for baseline.
2. **Best hypothesis:** 1 – Matches fluent nonsensical speech; outcomes in therapy.
3. **Best next step:** 2 – Correlates with upper motor signs; safety.
4. **Best hypothesis:** 1 – Selective pain/touch loss; accuracy.
5. **Best next step:** 1 – Quantifies spasticity; efficiency.
6. **Best hypothesis:** 1 – Dysmetria specific; balance safety.
7. **Best next step:** 1 – Confirms apraxia type; functional ethics.
8. **Best hypothesis:** 1 – Festinating classic; mobility outcomes.
9. **Best next step:** 3 – Urgency for lesion; accuracy.
10. **Best hypothesis:** 1 – Attention frontal; delirium urgency check.