Canadian Neurological Scale Reference Card (SEO)

Assess: Vital Signs and Pupils

Vital Signs: BP, Temp, Pulse, Respirations, Oximetry

Pupils: Size and reaction to light

Canadian Neurological Scale

Section A: MENTATION: LOC, Orientation, Speech

Level of Consciousness:

CNS (Alert, Drowsy) GCS (Stuporous, Comatose)

Orientation:

Place (city or hospital), Time (month and year)

*Patient can speak, write, or gesture their responses.

SCORE: Patient is Oriented, score 1.0, if they correctly state both place and correct month and year. If dysarthric, speech must be intelligible. If patient cannot state both, Disoriented, score 0.0

Speech:

RECEPTIVE: Ask patient the following separately (do not prompt by gesturing):

1. Close your eyes
2. Point to the ceiling

SCORE: If patient is unable to do both, Receptive Deficit, score 0.0, go to A2. If patient obeys commands leave blank and continue with expressive speech.

Expressive:

1. Show patient 3 items separately (pencil, watch, key) and ask patient to name each object.
2. Ask patient what each object is used for while holding each up again, i.e. “What do you do with a pencil?”

SCORE: If patient is able to state the name and use of all 3 objects, Normal Speech, score 1.0.

If patient is unable to state the name and use of all 3 objects, Expressive Deficit, score 0.5.

***If patient answers all questions correctly but speech is slurred and intelligible, score Normal Speech and record “SL” along with the score. If patient is intubated or trached, score Expressive Deficit and add a comment**

Section A1: MOTOR FUNCTION
No Comprehension (Receptive) Deficit

Face: Ask patient to smile/grin, note weakness in mouth or nasal/labial folds.

SCORE: None/no weakness = 0.5 or Present/weakness = 0.0

None 1.5	no weakness present
Mild 1.0	mild weakness present, full ROM, cannot withstand resistance
Significant 0.5	significant weakness, some movement, not full ROM
Complete 0.0	complete loss of movement; total weakness

Test both limbs and record the AFFECTED side.

SCORE:

Arm: Proximal – Ask patient to lift arm 45-90 degrees. Apply resistance between shoulder and elbow.

Arm: Distal – Ask patient to make fist and flex wrist backwards, apply resistance between wrist and knuckles.

Leg: Proximal – In supine, ask patient to flex hip to 90 degrees, apply pressure to mid thigh.

Leg: Distal – Ask patient to dorsiflex foot, apply resistance to top of foot.

Section A2: MOTOR RESPONSE
Comprehension (Receptive) Deficit Present

Face: Have patient mimic your smile. If unable, note facial expression while applying sternal pressure.

Arms: Demonstrate or lift patient's arms to 90 degrees, score ability to maintain equal levels (>5 secs).
If unable to maintain raised arms, apply nail bed pressure to assess reflex response.

Legs: Lift patient's hip to 90 degrees, score ability to maintain equal levels (>5 secs). If unable to maintain raised position, apply nail bed pressure to assess reflex response.

Reference:
Anemaet WK. Using standardized measures to meet the challenge of stroke assessment. Topics in Geriatric Rehabilitation 2002;18(2):47-62.
Cote, R., Hachinski, V. et al. The Canadian Neurological Scale: A Preliminary Study in Acute Stroke. Stroke. 1986;17:731-7.
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