

Brain Attack! How Rehab Nurses Prioritize Interventions to Support Safety

Chelsea Karpeh, BSN and and Kisha Okuesi, BSN, BC
Mount Sinai Beth Israel, New York, NY



Background

Stroke patients manifest sequelae in a variety of ways depending on the location and severity of the stroke. Strokes located in the left hemisphere can manifest with Apraxia Aphasia- difficulty understanding words, finding words to express thought, understanding grammatical sentences and reading or writing words or sentences (ASA, 2014). Strokes located on the right hemisphere can manifest with disorders of neglect and visual spatial problems. R CVA show increased impairments in pacing their overall rate of tasks performance, transporting tasks objects and coordinating their use of two body parts to effectively stabilize tasks objects (Bernspang, & Fisher 1995).

Study Aims

Nurses and PCA's on our unit are encouraged to identify different patient behaviors based on areas of brains in morning huddles and during report in order to provide safer care. Rehab nursing interventions targeting L vs R hemispheric stroke enable nurses to customize interventions on 3 Karpas.

Methods

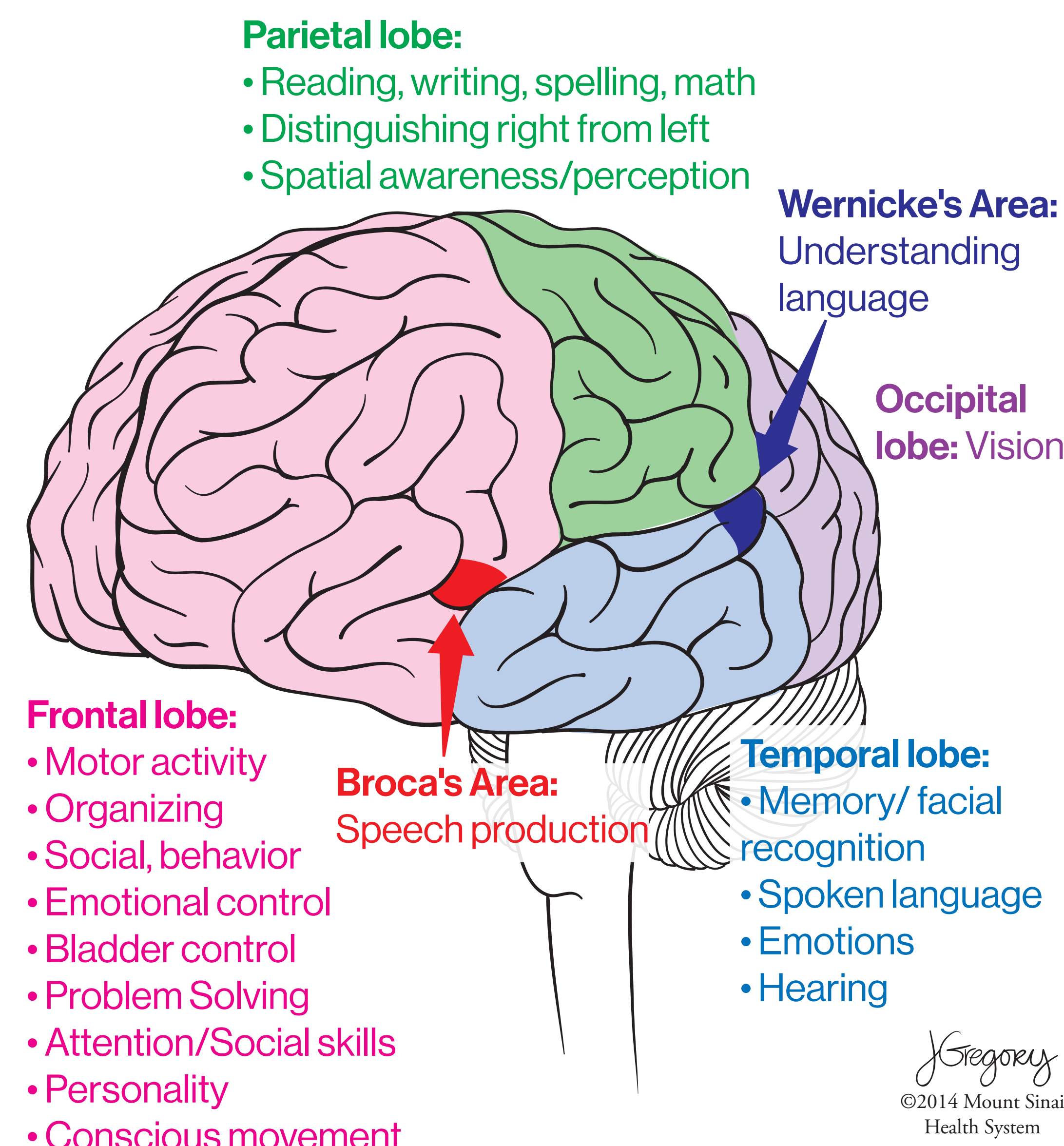
This was a quality improvement study. The participants included 19 full time Registered Nurses and 11 patient care associates on 3 Karpas, a 26 bed acute rehabilitation unit at Beth Israel Medical Center. An educational intervention was utilized.

Right CVA Interventions

<ul style="list-style-type: none"> Left paresis/paralysis/homonymous hemianopsia Visual, spatial, perceptual deficits (gets lost, cannot dress self, midjudges distance, spills) 	<ul style="list-style-type: none"> Approach left side & place objects in view past midline to improve vision/compensate neglect Orient room so people enter on left side Eliminate clutter to prevent falls. Personal items within reach. Use repetition/one-step commands PT and OT
Thought Process	
<ul style="list-style-type: none"> Unrealistic thoughts/poor judgment/Memory deficits. May have agnosia Difficulty finding locations/concrete thinking 	<ul style="list-style-type: none"> Safety due to patient impulsivity. Call bell placed within reach & constant reminders to call for help Establish daily routine (collaborate therapist) Mark rooms to easily find with cuing/ frequent reorienting
Emotions	
<ul style="list-style-type: none"> Cheerful/euphoric Anosognosia: Lack of awareness neurological deficit & ramifications of impairment (paralysis) Lack of awareness of nonverbal communication; display flat affect 	<ul style="list-style-type: none"> HIGH fall risk: Do not leave alone in bathroom/shower. Cue to deficits Apply splints for stability of proximal joints to prevent contractures. Elevate neglected limb & monitor to prevent shoulder subluxation & decrease swelling. Include family to support patients efforts & assist with care. Educate on expectation & deficits
Attention	
<ul style="list-style-type: none"> Short; highly distractible 	<ul style="list-style-type: none"> Determine readiness to engage in therapy. Work one to one in quiet setting. Minimize distractions. Keep sessions/ treatments short
Behavior	
<ul style="list-style-type: none"> Socially inappropriate: Risk taking. Quick egocentric impulsive 	<ul style="list-style-type: none"> Do not leave unattended (observation room). Use restraint (self release belt) to prevent injury Redirect patients attention when behaving inappropriately

Left CVA Interventions

<ul style="list-style-type: none"> Right paresis/paralysis/homonymous hemianopsia Difficulty gesturing/reading/writing Language deficits: Broca's/Wernicke's dysphagia 	<ul style="list-style-type: none"> Incorporate techniques by the speech therapist Involve affected side in therapy/ADLs Use simple words/sentences. Provide verbal prompts/ communication tools for self expression Listen attentively to convey importance of thoughts/promote a positive environment for learning PT and OT
Thought Process	
<ul style="list-style-type: none"> Difficulty listening, comprehending, learning/Short retention span Unable to process languages or think analytically 	<ul style="list-style-type: none"> Be patient/ Speak slowly/ Same staff work when possible Work with patient in short time frames to reduce frustration Offer encouragement
Emotions	
<ul style="list-style-type: none"> Easily frustrated or depressed Patient is aware of deficits 	<ul style="list-style-type: none"> Be patient. Offer encouragement/ acceptance. Positive reinforcement to build self-esteem Encourage practicing exercise independently to promote sense of control Monitor patient's statements of self-worth and acceptance of new imagine. Encourage to identify strengths/setting realistic goals.
Attention	
<ul style="list-style-type: none"> Usually normal 	<ul style="list-style-type: none"> Educate family on realistic communication expectations Limit sessions, care, or treatments based on individual needs
Behavior	
<ul style="list-style-type: none"> Slow, hesitant, cautious 	<ul style="list-style-type: none"> Allow plenty of time/ Requires encouragement/ Do not appear rushed



Results

RN's and PCA's who have studied the brain and complications of a CVA together provide better care related to the myriad complications a patient can experience after a CVA by reinforcing compensatory techniques that limit functional performance. (Bernspang, & Fisher 1995).

References

- Bernspang, B. & Fisher, A. (1995). Differences Between Persons With Right or Left Cerebral Vascular Accident on the Assessment of Motor and Process Skills. *Archives of Physical Medicine and Rehabilitation*, 76(12), 1144-1151.
- Gillen R, Tennen H, McKee T. (2005). Unilateral Spatial Neglect: Relation to Rehabilitation Outcomes in Patients With Right Hemisphere Stroke, *Archives of Physical Medicine and Rehabilitation*, 86(4), 765-767.
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- Association of Rehabilitation Nurses (2011). *The Specialty Practice of Rehabilitation Medicine – A Core Curriculum*. Glenview, IL: Association of Rehabilitation Nurses.