

N311 Care Plan 2

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Lakeview College of Nursing

N311: Foundations of Professional Practice

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Demographics (5 points)

Date of Admission 09/25/24	Client Initials LC	Age 78	Gender Female
Race/Ethnicity Caucasian	Occupation Retired	Marital Status Widow	Allergies Iodine contrast media, Venom-honey Bee, Iron.
Code Status Full Code	Height 155 cm	Weight 56 kg	

Medical History (5 Points)

Past Medical History: Atrial Fibrillation, Chronic Kidney Disease (CKD).

Past Surgical History: Patient does not have any significant past surgical history.

Family History: No family history on file.

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use):

The patient smokes half a pack per day, having smoked for 30 years. The patient denies the use of recreational drugs and alcohol use.

Admission Assessment

Chief Complaint (2 points): The patient presents with a new onset of left-sided weakness, left-sided facial droop, inability to look to the left, and dysarthria.

History of Present Illness – OLD CARTS (10 points): The 78-year-old caucasian female presented to the emergency department on September 25, 2024, with complaints of new onset of left-sided weakness, left-sided facial droop, inability to look to the left, and dysarthria. The patient states, “It feels like I can not move my left side.” The patient mentions feeling numbness and tingling in her left arm and leg for the past 4 hours, states discomfort in her left leg, and associates the discomfort with “pins and needles.” The patient states that her left arm and leg are weak, and lifting her extremities aggravates the pain. She mentions that laying supine relieved her symptoms for thirty minutes, but they have not entirely resolved. Therefore, EMS was called immediately for further evaluation, arrived within fifteen minutes, and transferred the patient to the hospital.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Cerebral Amyloid Angiopathy (CMS-HCC).

Secondary Diagnosis (if applicable): Intraparenchymal hematoma of brain, right, with unknown loss of consciousness status, initial encounter (CMS-HCC).

Pathophysiology

Pathophysiology of the Disease, APA format (20 points):

CVA (cerebrovascular accident) is the medical term for stroke, which is focal brain tissue damage and neurological deficits caused by an interruption in the blood supply to the brain (Broussard et al., 2022). There are two main types of stroke: ischaemic and hemorrhagic. Ischaemic strokes account for approximately eighty-seven percent of strokes and occur when a blood vessel supplying blood to the brain is blocked by a thrombus or embolus (Campbell et al.,

2020). Hemorrhagic strokes are caused by a rupture of a blood vessel, leading to bleeding within or outside the brain. It can be associated with increased intracranial pressure and secondary ischemia in the nearby tissues (Campbell et al., 2020).

At the cellular level, ischemia deprives brain cells of oxygen and glucose, the primary substrates for cellular metabolism. Neurons are highly susceptible to ischemia; within a few minutes of reduced perfusion, they initiate necrosis due to energy failure and the accumulation of toxic metabolites, triggering a series of biochemical processes that include excitotoxicity (due to excessive release of the neurotransmitter glutamate), inflammation and apoptosis culminating in the death of brain tissue (Broussard et al., 2022). The irreversibly damaged area is the infarct core, and surrounding areas may be salvageable if blood flow, the so-called penumbra, restores rapidly.

The specific ways that CVA affects the body's systems mean that signs and symptoms depend on the location and severity of the stroke. The neurological signs and symptoms include sudden weakness or numbness in the face, arm, or leg (usually on one side of the body), confusion, difficulty understanding speech, difficulty speaking, or difficulty with coordination (Campbell et al., 2020). Depending on the affected part of the brain, the patient might also have vision problems, loss of balance, or difficulty swallowing. When the motor system is affected, the condition is called hemiplegia; if the motor system is partially affected, the condition is called hemiparesis (Campbell et al., 2020). Depending on the part of the brain that was affected, there can also be changes in cognitive functions, such as confusion, memory loss, or mood changes.

Courtesy of Bill Branson, a diagnosis was made after assessing the patient's neurovascular status and brain hemodynamics (Broussard et al., 2022). A simple clinical

assessment (FAST: Face drooping, Arm weakness, Speech difficulties, Time to call emergency services) can be done by paramedics on the field, followed by a neuroimaging assessment (Broussard et al., 2022). The first-line imaging modality for neuroimaging after an initial assessment is a non-contrast computed tomography (CT) scan. Imaging helps to distinguish between ischaemic and hemorrhagic strokes (Broussard et al., 2022). Magnetic resonance imaging (MRI) may also be used to assess and evaluate the extent of brain damage (Broussard et al., 2022).

In summary, stroke pathophysiology is a consequence of interactions at the cellular level, which culminate in global neurological deficits and multisystem complications (Campbell et al., 2020). The understanding of stroke pathophysiology, clinical manifestations, and diagnosis is essential in timely intervention for stroke patients. The timely diagnosis and treatment of stroke can improve their outcomes and reduce long-term disability (Campbell et al., 2020).

Pathophysiology References (2) (APA):

Broussard, G., Hu, Y., & Behrens, M. (2022). The pathophysiology of ischemic stroke. *Nature Reviews Neurology*, 18(3), 190-207. <https://doi.org/10.1038/s41582-022-00665-8>.

Campbell, B. C. V., Mitchell, P. J., Yan, B., & Farago, G. (2020). Management of hemorrhagic stroke. *Frontiers in Neurology*, 11(2), 159-164. <https://doi.org/10.3389/fneur.2020.00159>.

Vital Signs, 1 set (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
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0830	69 bpm	141/58 mmHg	16 respirations per minute	97.6 F Oral	98% RA
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Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1157	Numeric Scale	N/A	0/10	N/A	The patient stated she was not in pain; no intervention needed.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
NS 500 mL	Urine voided - 180 mL
Total: 500 mL	Total: 180 mL

Nursing Diagnosis (15 points)

Must be NANDA approved nursing diagnosis

Nursing Diagnosis	Rationale	Interventions (2 per dx)	Outcome Goal (1 per dx)	Evaluation
<ul style="list-style-type: none"> Include full nursing diagnosis with “related to” and “as evidenced by” components. Listed in order by priority – highest priority 	<ul style="list-style-type: none"> Explain why the nursing diagnosis was chosen 			<ul style="list-style-type: none"> How did the client/family respond to the nurse’s actions? Client response, status of goals and outcomes, modifications to plan.

to lowest priority pertinent to this client				
<p>Impaired physical mobility related to hemiparesis, loss of balance and coordination, and brain injury as evidenced by left-sided weakness, left facial droop, and inability to look to the left (Belleza, 2024)</p>	<p>The nursing diagnosis explains the patient's complaint of left-sided weakness, left facial droop, and inability to look to the left. The patient also reported symptoms of numbness and tingling.</p>	<p>1. Measure vital signs and neurological status frequently: Monitor trends in the level of consciousness, reflexes, and motor function to determine whether or not the interventions are working and to detect rapid deterioration in the condition (Belleza, 2024). 2. Give medications ordered (e.g., anticoagulants or thrombolytics): Make sure medications are given on time to help restore blood flow to the</p>	<p>1. The patient will show improved cerebral perfusion as demonstrated by the patient's vital signs remaining stable and no further neurological deficits within 24 hours.</p>	<p>The patient remained stable, and no further neurological status declined during the next hour of monitoring. The family appreciated the rapid care, asked questions about the treatment plan, and verbalized understanding.</p>

		organ and reduce long-term damage (Belleza, 2024).		
Impaired verbal communication related to brain damage, as evidenced by the patient's chief complaint of left-sided facial drooping and left-sided deficits in the left upper and lower extremities (Belleza, 2024).	The nursing diagnosis explains that the patient complained of left-sided facial drooping and left-sided deficits to the left upper and lower extremities, which indicate motor deficits.	<p>1. Consult with a speech therapist to assess the gag reflex and help teach alternative swallowing techniques (Belleza, 2024).</p> <p>2. Maintain consistency with schedules, routines, and repetitions. Tools like written schedules, checklists, audiotapes, and a communication board can support memory and concentration (Belleza, 2024).</p>	The patient will use alternative communication methods, such as gestures or a communication board, to express basic needs effectively within two weeks.	The patient responded well to the nurse's actions. The patient reported effectively communicating using a communication board and various gestures. Goal met: the patient could verbalize an understanding of the condition and disease process.

Other References (APA):

Belleza, M., (2024). *Cerebrovascular Accident (Stroke) Nursing Care Plans*. Nurselabs.

<https://nurseslabs.com/cerebrovascular-accident-stroke/>

Concept Map (23 Points):



