

N311 Care Plan 1

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N311: Foundations of Professional Practice

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Demographics (5 points)

Date of Admission September 20, 2023	Client Initials AW	Age 68 years	Gender Male
Race/Ethnicity African American	Occupation Unemployed d/t mental disability	Marital Status Single	Allergies Penicillin
Code Status Full Code	Height 5'10"	Weight 218lbs	

Medical History (5 Points)

Past Medical History: COPD, abdominal pain, hypertension, hypoglycemia, hypocalcemia, pain, periodontitis, urinary incontinence, urinary retention.

Past Surgical History: No surgical history on file; unable to obtain, patient nonverbal.

Family History: No family history on file; unable to obtain, patient nonverbal, no next of kin.

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

No history of tobacco, alcohol, or drug use on file; unable to obtain, patient nonverbal.

Admission Assessment

Chief Complaint (2 points): Extremity weakness.

History of Present Illness – OLD CARTS (10 points):

Client presented to the emergency department on September 20, 2023, with a complaint of extremity weakness. Medical staff at the client's group home stated that the client suddenly became unable to walk, with or without assistance, two to three weeks prior. Upon assessment, weakness was noted in the bilateral lower extremities with the right appearing significantly weaker than the left, and a slight droop was noted on the right side of the client's face. The

weakness appears to be continuous. Due to the client's mental state and nonverbal status, a description of the chief complaint was unable to be obtained. Aggravating factors are unable to be assessed. The client is experiencing gait issues and appears to be unable to hold himself up straight, causing him to lean to his right side. Relieving factors are unable to be identified. Per the patient's medical records, this is the first-time treatment has been received for extremity weakness.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Cerebrovascular Accident (rule-out)

Secondary Diagnosis (if applicable): N/A

Pathophysiology

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

The client presented to the emergency department with extremity weakness, which prompted a rule out panel for a cerebrovascular accident, or a CVA, to be performed. A cerebrovascular accident is the result of one of two types of injury to the brain: ischemia of the tissue or hemorrhaging of a cerebral artery (Capriotti, 2020). These two types are commonly known as ischemic strokes and hemorrhagic strokes. This pathophysiology will focus on ischemic CVAs.

Ischemia occurs when there is a blockage in blood vessels supplying tissue with oxygen. This blockage prevents adequate blood flow to the cells, resulting in hypoxia, which is a lack of oxygen of the cells and tissue. In an ischemic CVA, a blood clot that has formed in the vessel (thrombus) or some foreign material, such as fat, air, plaque, or a blood clot that has dislodged from a vessel somewhere else in the body (embolus) is the source of the blockage (Capriotti,

2020). Typically, the internal carotid artery or the middle cerebral artery are the vessels involved in ischemic CVAs, as they supply most of the blood to the brain (Capriotti, 2020). Ischemic CVAs are often a result of arteriosclerosis, atrial fibrillation, or carotid stenosis (Capriotti, 2020). With arteriosclerosis, plaque builds up on the walls of the vessel, causing a narrowing of the vessel. If the plaque breaks off from the vessel walls, it may travel to the brain and cause a blockage (Kuriakose & Xiao, 2020). In atrial fibrillation, blood sits in the heart too long and can begin to clot. These clots may dislodge from the heart and travel to the brain, where they can block the vessels (Kuriakose & Xiao, 2020). Lastly, carotid stenosis is caused by plaque that has built up in the carotid artery. In carotid stenosis, the ischemia can be due to the narrowing of the vessel, or from the plaque breaking off and traveling directly to the brain, as the carotid artery supplies the brain with blood (Capriotti, 2020).

In any type of ischemic CVA, when the cells remain hypoxic for too long, the brain tissue begins to die. This is known as infarction. Once infarction occurs, the cells are unable to maintain their form and function. Depending on the location of the CVA in the brain, the body will react in different ways. CVAs that occur on the left side of the brain will cause speech, motor, and sensory issues (Capriotti, 2020). When a CVA occurs in the right side of the brain, sensory and motor issues arise (Capriotti, 2020). Since the neural tracts in the brain cross, symptoms often manifest in the opposite side of the body than the affected area of the brain (Capriotti, 2020). These effects will be seen in the signs and symptoms.

Some common signs and symptoms of a cerebrovascular accident are: extremity weakness or loss of sensation, typically in one side of the body; drooping of the face on one side, including the eyes and mouth; speech deficits, like slurring or expressive aphasia; changes to level of consciousness or understanding, such as confusion, feeling drowsy, being disoriented, or

receptive aphasia; problems with vision; vertigo or dizziness; and gait and balance issues (Capriotti, 2020). Some clinical signs may be indicated by vitals. An elevated blood pressure and low oxygen saturation may be seen in patients experiencing an ischemic stroke (Kuriakose & Xiao, 2020). Additionally, abnormal lab levels will be present.

Diagnosis of a CVA includes a variety of testing, such as blood panels, imaging, and stroke scales. Blood tests to help diagnose a CVA include: a comprehensive metabolic panel (CMP) to look at renal function and glucose and electrolyte levels; complete blood count (CBC); clotting factor labs, such as prothrombin time/INR (PT/INR) and partial thromboplastin time (PTT); and troponin to look at cardiac enzyme levels (*How is stroke diagnosed?*, 2021).

Diagnostic imaging for an ischemic stroke includes: computerized tomography (CT) scans, which are performed without contrast in order to rule out any bleeding in the brain prior to giving blood thinners, followed by a CT with contrast to better see any ischemic vessels and hypoxic tissue; magnetic resonance angiography (MRA), which helps differentiate the type of CVA; and an ultrasound of the skull called a transcranial doppler to look for decreased circulation and increased ICP (Capriotti, 2020). Lastly, the National Institute of Health's Stroke Scale is utilized to assign a point system to the signs and symptoms of a stroke (Capriotti, 2020). This can help in the triage of patients who present with stroke-like symptoms.

As the client of this care plan presented with the chief complaint of extremity weakness and facial droop, a full CVA diagnosis panel was performed. All lab work and imaging were negative for an ischemic stroke, and therefore a CVA was ruled out.

Pathophysiology References (2) (APA):

Capriotti, T. (2020). Chapter 33. In *Davis Advantage for pathophysiology: Introductory Concepts and Clinical Perspectives* (Second Edition, pp. 806–814). F.A. Davis Company.

Kuriakose, D., & Xiao, Z. (2020, October 15). *Pathophysiology and treatment of stroke: Present status and future perspectives*. International journal of molecular sciences.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7589849/>

U.S. Department of Health and Human Services. (2021, February 17). *How is stroke diagnosed?*.
 How is stroke diagnosed? .
<https://www.womenshealth.gov/heart-disease-and-stroke/stroke/stroke-treatment-and-recovery/how-stroke-diagnosed>

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1100	79 bpm	110/71, supine	14 bpm	98.2°F, temporal	94%, room air

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1100	N/A	N/A	N/A	N/A	N/A

Unable to assess pain, patient is nonverbal. No acute signs of distress or facial indications of pain.