N311 Care Plan # 2

Lakeview College of Nursing

Jayda Davis

Demographics (5 points)

Date of Admission 10/6/16	**Client Initials** T. R	**Age** 62	**Gender** Female
Race/Ethnicity Caucasian	**Occupation** Retired	**Marital Status** Widowed	**Allergies** N/A
Code Status DNR	**Height** 61 inches	**Weight** 81.6 kg	

Medical History (5 Points)

Past Medical History: Abnormal posture, Muscle weakness, Dysphagia, Dementia, Urinary incontinence, Hypertension, Hyperlipidemia.

Past Surgical History: No history documented. Patient unable to give information.

Family History: No history documented. Patient unable to give information.

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): No tobacco, alcohol, or drug use

Admission Assessment

Chief Complaint (2 points): Weakness and paralysis on the left side of body

History of Present Illness – OLD CARTS (10 points): On October 16th, a 62-year-old female was admitted to Mattoon Rehabilitation and Health center for long-term care due to weakness and paralysis on the left side of the body. The patient reported experiencing weakness and paralysis on the left side of the body after having a traumatic brain injury. The patient reports that she has full paralysis on the left side of her of face throughout the entire left side of her body. The patient has been having weakness and paralysis for about 5 years now. Transferring, urinating, and performing ADLs cannot be done due to paralysis on the left side of the body.

Sitting and laying down makes the patient feel better. The patient is in physical and occupational therapy to help with the weakness and paralysis on the left side of the body.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Traumatic Brain Injury

Secondary Diagnosis (if applicable): Spastic Hemiplegia affecting the left non-dominant side

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

Traumatic Brain Injury is sudden physical damage to the brain. The damage can result from falls, sports injuries, assaults, motor vehicle accidents, and penetrating brain injuries (Capriotti, 2022, p. 851). TBIs can cause an altered state of consciousness that can alter physical functioning and cognitive abilities (Capriotti, 2022, p. 851). TBI is a leading cause of death and disability in those under 24 years of age (Capriotti, 2022, p. 851). Some symptoms of TBI are seizures, loss of consciousness, vomiting, nausea, dilation of one or both pupils in the eyes, and clear fluids draining from the nose or ear (Galgango et al., 2017).

In TBIs, the pathogenesis is a complex process that results from primary and secondary injuries that can lead to temporary or permanent neurological deficits (Galgango et al., 2017). The primary deficit is directly related to the immediate external impact on the brain (Galgango et al., 2017). The secondary injury can happen within minutes from the immediate impact and consists of chemical, molecular, and inflammatory cascades responsible for further cerebral damage (Galgango et al., 2017). Intracellular calcium activates a series of mechanisms by activating the enzymes caspases and free radicals that degrade the cells through an apoptotic process. The degradation of the neuronal cells stimulates an inflammatory response that damages neuronal cells, creates a breach of the blood-brain barrier, and causes cerebral edema (Galgango

et al., 2017). Compensatory mechanisms occur when the intracranial pressure exceeds its normal compacity (Galgango et al., 2017). The increase in intracranial pressure is caused by blood, cytotoxic and vasogenic edema, and venous congestion (Galgango et al., 2017). The brain tissue then becomes incompressible. Thus, the edematous brain will cause the extrusion of cerebrospinal fluid to leak into the spinal column (Galgango et al., 2017). This can cause blood from the venous origin to extrude away from the brain (Galgango et al., 2017). Without proper intervention, the compensatory mechanisms can fail and result in pathological brain compression, leading to death (Galgango et al., 2017).

TBIs are diagnosed with computerized tomography (CT) scans and magnetic resonance imaging (MRI) (Capriotti, 2022, p. 859). CT scans show bleeding and pressure on the brain's vital structures (Capriotti, 2022, p. 859). It also can be used to determine the hemorrhage size, mass effect, and cerebral spinal fluid volume in the brain (Capriotti, 2022, p. 859). A CT angiography is helpful because it uses a dye to highlight the blood vessels in the brain and can show aneurysms, vascular dissections, and occlusions in the brain (Capriotti, 2022, p. 859). MRIs examine the brain's deeper structures, and they can show edema and microhemorrhage in the brain (Capriotti, 2022, p. 859). An electroencephalogram (EEG) monitors the brain's activity (Capriotti, 2022, p. 859). EEGs can evaluate seizures and determine the depth of a drug-induced coma (Capriotti, 2022, p. 859). The primary treatment of TBIs is dependent on how severe the TBI is. Mild TBIs are treated with rest and adequate sleep (Capriotti, 2022, p. 861). Patients with severe TBIs are treated in an intensive care unit. Mechanical ventilation can be used with the patient, and neurological assessments are done frequently to monitor the patient (Capriotti, 2022, p. 861). Rehabilitation therapies such as physical, occupational, speech, and cognitive therapy

usually begin during the patient's stay in the hospital and continue after post-hospitalization (Capriotti, 2022, p. 861).

The patient was diagnosed with a TBI due to a fall and a stroke. CT and MRI scans were used to diagnose the TBI. The patient now has spastic hemiplegia affecting the left side of her body. The patient requires multiple rehabilitation therapies and complete assistance with her activities of daily living. The patient should be taught skills for the non-affected side of her body to have a sense of independence.

Pathophysiology References (2) (APA):

Capriotti, T. M. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F. A. Davis Company. https://fadavisreader.vitalsource.com/books/9781719641470

Galgano, M., Toshkezi, G., Qiu, X., Russell, T., Chin, L., & Zhao, L.-R. (2017). *Traumatic brain injury: Current treatment strategies and future endeavors*. Cell transplantation. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5657730/

Laboratory Data (20 points)
If laboratory data is unavailable, values will be assigned by the clinical instructor

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC ($x10^6/\mu L$)	4.28-5.56	N/A	N/A	N/A
Hgb (g/dL)	13.0-17.0	N/A	N/A	N/A
Hct (%)	38.1-48.9	N/A	N/A	N/A
Platelets (K/µL)	149-393	N/A	N/A	N/A
WBC (K/µL)	4.0-11.7	N/A	N/A	N/A
Neutrophils (%)	45.3-79.0	N/A	N/A	N/A
Lymphocytes (%)	11.8-45.9	N/A	N/A	N/A
Monocytes (%)	4.4-12.0	N/A	N/A	N/A
Eosinophils (%)	0.0-6.3	N/A	N/A	N/A
Bands (%)	1-5	N/A	N/A	N/A

Chemistry Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na- (mmol/L)	136-145	N/A	139	N/A
K+ (mmol/L)	3.5-5.1	N/A	3.9	N/A
Cl- (mmol/L)	98-107	N/A	104	N/A
CO2 (mmol/L)	21-31	N/A	27	N/A
Glucose (mg/dL)	74-109	N/A	86	N/A
BUN (mg/dL)	7-25	N/A	24	N/A

Creatinine (mg/dL)	0.60-1.20	N/A	0.76	N/A
Albumin (g/dL)	3.5-5.2	N/A	N/A	N/A
Calcium (mg/dL)	8.6-10.3	N/A	10.1	N/A
Mag (mg/dL)	1.8-3.0	N/A	N/A	N/A
Phosphate (units/L)	1.7-2.6	N/A	N/A	N/A
Bilirubin (mg/dL)	0.3-1.0	N/A	N/A	N/A
Alk Phos (units/L)	34-104	N/A	N/A	N/A

Urinalysis Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	Light yellow and clear	N/A	N/A	N/A
pH	5.0-8.0	N/A	N/A	N/A
Specific Gravity	1.005-1.034	N/A	N/A	N/A
Glucose	Negative	N/A	N/A	N/A
Protein	Negative	N/A	N/A	N/A
Ketones	Negative	N/A	N/A	N/A
WBC	0-5	N/A	N/A	N/A
RBC	0-5	N/A	N/A	N/A
Leukoesterase	Negative	N/A	N/A	N/A

Cultures Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	Negative	N/A	N/A	N/A
Blood Culture	Negative	N/A	N/A	N/A
Sputum Culture	Negative	N/A	N/A	N/A
Stool Culture	Negative	N/A	N/A	N/A

Lab Correlations Reference (1) (APA):

Kee, J. L. F. (2017). *Pearson Handbook of Laboratory & Diagnostic tests with nursing implications* (8th ed.). Pearson Publication.

Sarah Bush Lincoln Hosp (2022) Lab Values. Sarah Bush Lincoln Hospital.

Diagnostic Imaging

All Other Diagnostic Tests (10 points): Chest X-Ray 7/9/2022- The patient was admitted to Sarah Bush Lincoln Hospital with shortness of breath and chest pain due to a medical history of hypertension. Hypertension causes the narrowing of the pulmonary artery, which restricts adequate blood flow through the lungs. A chest x-ray was given to the patient to visualize the structure of the chest and lungs (Capriotti, 2022, p. 479). The chest x-ray can show different lung abnormalities like inadequate lung expansion, pneumothorax, and fluid in the lungs (Capriotti, 2022, p. 480). The patients' results included no acute osseous or soft tissue abnormalities, no pneumothorax, and changes in the bibasilar atelectasis.

Diagnostic Imaging Reference (1) (APA):

Capriotti, T. M. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F. A. Davis Company. https://fadavisreader.vitalsource.com/books/9781719641470

Current Medications (10 points, 2 points per completed med)
5 different medications must be completed

Medications (5 required)

Brand/ Generic	Zestril/ Lisinopril	Aleve/ Naproxen sodium	Crestor/ Rosuvastatin calcium	Zofran/ Ondansetron hydrochloride	Microzide/ Hydrochlorothiazide
Dose	20 mg	220 mg	5 mg	4 mg	12.5 mg
Frequency	QD	BID	QD	QD	QD
Route	PO	PO	PO	PO	PO
Classification	Angiotensin-converting enzyme inhibitor & Antihypertensive	NSAID & Analgesic	HMG-CoA reductase inhibitor & Antilipemic	Selective serotonin (5-HT3) receptor antagonist & Antiemetic	Thiazide diuretic & Diuretic
Mechanism of Action	Reduce blood pressure by inhibiting angiotensin I conversion to angiotensin II. Helps decrease aldosterone which helps the reduction of sodium and water retention. This then	Blocks cyclooxygenase. Helps reduce symptoms of swelling, inflammation, and pain. (Jones, 2022)	Rosuvastatin inhibits the enzyme 3-methylglutaryl-coenzyme A reductase. Thus, reduces lipid levels. Also, inhibits hepatic synthesis of	Blocks serotonin receptors centrally in the chemoreceptor trigger zone and at the vagal nerve terminals in the intestine. Thus, reduces nausea and vomiting by	Promotes movement of sodium, chloride, and water from the blood in the peritubular capillaries into the nephron's distal convoluted tubule. Helps decrease blood pressure, cardiac output extracellular

	helps lower blood pressure. (Jones, 2022)		very-low-density lipoprotein (VLDL), which decreases the total number of VLDL and LDL particles. (Jones, 2022)	preventing serotonin release in the small intestine and blocking the signals to the CNS. (Jones, 2022)	fluid volume, and plasma volume. (Jones, 2022)
Reason Client Taking	To treat hypertension	To help with pain in the legs	To treat hyperlipidemia	To prevent nausea and vomiting	To manage hypertension
Contraindications (2)	Hereditary or idiopathic angioedema. Bilateral renal artery stenosis (Jones, 2022)	Hypertension Hemorrhagic stroke (Jones, 2022)	Angioedema Active liver disease (Jones, 2022)	Concomitant use of apomorphine Hypersensitivity to ondansetron. (Jones, 2022)	Anuria Hypovolemia (Jones, 2022)
Side Effects/Adverse Reactions (2)	Headaches Muscle spasms (Jones, 2022)	Dysphagia Cognitive impairment (Jones, 2022)	Memory loss Nausea (Jones, 2022)	Weakness Arrhythmias (Jones, 2022)	Hypotension Dry mouth (Jones, 2022)

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2022). *2022 nurse's drug handbook* (21st ed.). Jones & Bartlett Learning.

Assessment

Physical Exam (18 points) – HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	ANO x4. Patient was alert and oriented. Patient was in no acute distress. Patient was well groomed.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** 13 **Drains present: Y☐ N ☒** **Type:**	Patient's skin was dry, scaley, intact, and warm. No rashes, lesions, or bruising. Skin color was pink and white. Skin turgor was elastic and <3 seconds. Braden score is 13.
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Patients head and neck are symmetrical. Thyroid is non palpable. Trachea is midline with no deviation. Bilateral carotid pulses are palpable and 2+. Bilateral sclera white, bilateral conjunctiva is pink, and bilateral cornea is clear. Bilateral lids are pink and moist without any lesions or discharge. PERRLA is bilaterally and EOM's intact bilaterally. The nose is midline, and the septum is midline. Turbinate's are moist and pink bilaterally with no visible drainage or polyps. Bilateral frontal sinuses are nontender to palpation. Tongue and buccal mucosa were pink, and moist, with no lesions. The patient was missing 6 teeth.
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** Unable to assess **Capillary refill: <3** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:** N/A	S1 and S2 heart sounds were clear and audible without murmurs or gallops. Cardiac rhythm is steady and regular. Carotid and radial pulses were palpable and are 3+. Capillary refill was <3 sec in fingers bilaterally. No jugular vein distention was seen.
RESPIRATORY:	No abnormal lung sounds during auscultation.

Accessory muscle use: **Y☐ N ☒** **Breath Sounds: Location, character**	Lung sounds were clear anterior/posterior bilaterally. No accessory muscles were used for respiration. No wheezes, crackles, or rhonchi were noted.
GASTROINTESTINAL: **Diet at home:** N/A **Current Diet:** Regular Diet **Height:** 61.0 inches **Weight:** 81.6 kg **Auscultation Bowel sounds:** Unable to assess **Last BM:** Patient unable to give information. **Palpation: Pain, Mass etc.:** Unable to assess **Inspection:** Unable to assess **Distention:** Unable to assess **Incisions:** Unable to assess **Scars:** Unable to assess **Drains:** Unable to assess **Wounds:** Unable to assess **Ostomy:** **Y ☐ N ☒** **Nasogastric:** **Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube** **Y ☐ N ☒** **Type:**	The patient is on a regular diet. The patient's height is 60.1 inches and weighs 81.6 kg. The patient was unable to report the last bowel movement she had. The patient has no ostomy, nasogastric, or feeding tubes.
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination:** **Y ☐ N ☐** **Dialysis:** **Y ☐ N ☐** **Inspection of genitals:** **Catheter: Y ☒ N ☐** **Type:** **Size:**	Did not visualize during clinical.
MUSCULOSKELETAL: **Neurovascular status:** Unable to assess **ROM:** Unable to assess **Supportive devices:** Wheelchair & Hoyer lift **Strength:** Unable to assess **ADL Assistance:** **Y☒ N ☐** **Fall Risk:** **Y ☒ N☐** **Fall Score: 40**	The patient needs full ADL assistance. The patient uses a wheelchair and a Hoyer lift. The patient is not able to move or walk. The patient is a fall risk. The fall score is 40.

Activity/Mobility Status: **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☒ **Needs support to stand and walk** ☐	
NEUROLOGICAL: **MAEW: Y** ☐ **N**☐ **PERLA: Y** ☐ **N**☐ **Strength Equal: Y** ☐ **N** ☐ **if no -** **Legs** ☐ **Arms** ☐ **Both** ☐ **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Unable to assess.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	Unable to assess.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0732	70 bpm	112/60 LA	18 resp/min	36.7 ˚C Oral	98% RA

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1142	Numeric pain scale	N/A	0	N/A	N/A

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
75% breakfast	Did not visualize during clinical.

75% lunch 200 mL of coffee 200 mL of water	

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components • Listed in order by priority – highest priority to lowest priority pertinent to this client	**Rationale** • Explain why the nursing diagnosis was chosen	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation** • How did the client/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Ineffective tissue perfusion related to traumatic brain injury as evidence by changes in speech.	This diagnosis was chosen because the patient struggles with aphasia.	1. Perform neurological exams q.wk. 2. Patient will see a speech therapist b.i.w.	1. Neurological status will stay stable and have no changes.	The patient is willing to do speech therapy. The patient is okay with having speech b.i.w.
2. Impaired physical ability related to spastic hemiplegia as evidence by slowed movements.	This diagnosis was chosen because the patient has slow movements on the left and right side of the	1. Perform range of motion exercises to help strengthen muscles. 2.Turn and position the patient Q2H as the patient is not able to freely move around.	2. Patient shows no evidence of contractures, venous stasis, and skin breakdown.	The patient is compliant with instructions. Is willing to do range of motion exercises and understands that she must be turned every Q2H to prevent

	body.			skin breakdown.

Other References (APA):

Phelps, L. L. (2020). *Sparks and Taylor's nursing diagnosis reference manual* (11th ed.). Wolters Kluwer.

Wayne, G. (2022). *Ineffective tissue perfusion – nursing diagnosis & care plan*. Nurseslabs Retrieved from https://nurseslabs.com/ineffective-tissue-perfusion/

Concept Map (20 Points):

Subjective Data

Patient reported no pain
Weakness
Confusion

- Blood pressure- 112/60
- ℃
- Pulse- 70 beats per minute
- Oxygen- 98 %

Objective Data

Client information

- 62 year old patient has suffered a traumatic brain injury.
- The patient also has a diagnosis of spastic hemiplegia affecting left nondominant side.
- Admitted to long term care facility for TBI.

Nursing Diagnosis/Outcomes

- Ineffective tissue perfusion related to traumatic brain injury as evidence by changes in speech.
- The patient's status will stay stable and have no changes.
- Impaired physical ability related to spastic hemiplegia as evidence by slowed movements.
- Patient shows no evidence of contractures, venous stasis, and skin breakdown.

Nursing Interventions

- Perform neurological exams q. wk.
- Turn and position patient Q2H.
- Patient will see a speech therapist b.i.w.
- Help patient with range of motion exercises to strengthen muscles.