N311 Care Plan #1

Lakeview College of Nursing

Name Berich Mpoy

Demographics (5 points)

Date of Admission	**Client Initials**	**Age**	**Gender**
1/23/20	CB	75	M
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
Caucasian	N/A	Divorced	None
Code Status	**Height**	**Weight**	
DNR	70.0 inches	148.4l lbs.	

Medical History (5 Points)

Past Medical History: Parkinson's disease chronic laryngitis, irritable bowel syndrome without diarrhea, periodic paralysis, injury of the sciatic nerve at the hip and thigh level, left the leg secular, malignant neoplasm of Male, genital organ unspecific, atherosclerotic heart disease of the native coronary artery without angina pectoris, bipolar two disorder, unspecified dementia without behavioral disturbances, urinary tract infection site not specified, hypersomnia and specified, vitamin D deficiency unspecified, hyperlipidemia and specified, hypertensive heart disease without heart failure, abdominal aortic aneurysm without rapture, old myocardial infarction essential primary hypertension, weakness.

Past Surgical History: Not Available

Family History: Not available

Social History (tobacco/alcohol/drugs including frequency, quantity, and duration of use): denied alcohol use 07/12/18. The patient has been a former smoker since 7/12/2018. The patient denied any drug use since oh 7/12/18.

Admission Assessment

Chief Complaint (2 points): altered mental status

History of Present Illness – OLD CARTS (10 points): the client was noted to have 85% oxygen on roamer increasing weakness and altered mental status times 2. the patient has no aggravating factor or relieving factors. The client was treated with vancomycin and cefepime related to UTI with no results.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): The patient was diagnosed with sepsis upon admission.

Secondary Diagnosis (if applicable): urinary tract infection

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

Sepsis is a body-wide infection that overworks the immune system causing multiorgan compromise. Bacteria is the most common cause of sepsis, although other organisms such as viral, fungal, and parasites can cause sepsis. In bacterial sepsis, the bacteria multiply in the body, causing organ failure. The infection usually begins at one organ system and then spreads into the bloodstream, causing what is known as septic shock. Urinary tract infection is the leading cause of sepsis in older adult clients. When sepsis becomes severe, it is defined as sepsis complicated by end-organ dysfunction. Patients with this type of sepsis usually manifest altered mental status, hypertension, renal insufficiency, with failure of the coagulation system. Sepsis can lead to sept, I c shock, a state of severe sepsis that is life-threatening. Widespread vasodilation occurs in the body during septic shock, with hypertension refractory to fluid replacement and vasopressors. IV fluids and vasoconstrictor medications cannot alleviate the blood pressure when this happens. Pathogens such as clostridia, S.aureus, Streptococci, Yersinia pestis, and Meningococci can produce \ that cause septic shock. Some signs and symptoms of sepsis are impaired organ

function and perfusion, altered mental status, hypoxemia, elevated plasma lactate level, oliguria, systolic hypertension below 100 mm Hg. People at risk for sepsis are diabetic patients, immunocompromised people, older adults, infants, and post-operative patients. Diseases that put people at risk for sepsis are pulmonary disease, renal insufficiency, diabetes, and cancer. Patients with long-term indwelling catheters, like my patient, can develop sepsis with microbes that are not usually pathogenic but can cause mild infections in people with standard immune systems but can turn into septic shock in immunocompromised patients. When sepsis occurs, “toxins and inflammatory mediators such as interleukins (ILs), nitric oxide (NO), thromboxane A2, prostacyclin, and tumor necrosis factor-alpha (TNF-alpha), cause widespread arterial vasodilation” (Capriotti, 2020, p. 1153). Capillary permeability is increased due to plasma entering the tissues and inflammatory mediators activating the coagulation pathway, leading to blood clots. The endothelium bed is injured during sepsis which leads to a coagulation cascade. Sepsis also inhibits the activation of protein C, which causes anticoagulants, and the activation of plasminogen fibrinolysis system end exotoxins interfere with the coagulation cascade causing insufficient clothing. Epinephrine end cortisol in sepsis causes the breakdown of glycogen and reduces insulin sensitivity; because of this, blood sugar becomes elevated and difficult to control with insulin. Hyperglycemia in sepsis impairs white blood cells’ ability to phagocytose and lyse offending microbes. “The treatment of septic shock is very complex and may involve multiple specialists, including an infectious disease specialist, a pulmonologist, a surgeon, an intensivist, a cardiologist, and a nephrologist.” (Capriotti, 2020, p. 1163). Treatments require the use of broad-spectrum antibiotics, vasoconstrictors, and Surgery to treat the source of infection. Dialysis may also be necessary and intuition with mechanical ventilator support if the patient is in respiratory failure. Treatments for sepsis are specific to each patient.

My patient was diagnosed with sepsis and a urinary tract infection. My patient presented with altered mental status x2, weakness, and immobility. Since my patient was placed on hospice care, he was not provided with any treatment for sepsis mentioned above.

Pathophysiology References (2):

Capriotti, T. M. (2020). *Davis Advantage for Pathophysiology Introductory Concepts and Clinical Perspectives*. [FADavis]. Retrieved from https://fadavisreader.vitalsource.com/#/books/9781719641470/

Schulte, W., Bernhagen, J., & Bucala, R. (2013). *Cytokines in sepsis: potent immunoregulators and potential therapeutic targets--an updated view. Mediators of inflammation, 2013*, 165974. https://doi.org/10.1155/2013/165974

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	4.0-5.8×10^6/	4.54mcl	5.44mcl	N/A

	mcL			
Hgb	12.0-15.8g/dL	14.2g/dl	16.5g/dl	Heart failure and dehydration is the cause of this elevated Hgb.
Hct	36.0-47.0%	40.8%	48.5%	The most likely cause of elevated hematocrit is dehydration in this patient.
Platelets	140-440K/ mcL	150mcl	219mcl	N/A
WBC	4.0-12.0K/ mcL	5.0mcl	7.0mcl	N/A
Neutrophils	40-60%	63.8%	74.1%	Sepsis is the cause of increased neutrophils. Neutrophils are part of the innate immune response during sepsis releasing cytokines and engulfing pathogens. Until all the infections are destroyed, more neutrophils are produced.
Lymphocytes	19-49%	23.5%	17.8%	N/A
Monocytes	3.0-13.0%	10.4%	6.8%	N/A
Eosinophils	0.0-8.0%	1.4%	0.6%	N/A
Bands	0.0-10.0%	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-	134-144mmol/ L	N/A	140mmol/ l	N/A
K+	3.5-5.1mmol/L	N/A	5.2mmol/l	K+ is slightly elevated due to filtration impairment caused by urinary tract infection in this patient. (Capriotti, 2020).
Cl-	98-107mmol/L	N/A	107mmol/ l	N/A
CO2	21-31mmol/ L	N/A	24mmol/l	N/A
Glucose	70-99mg/dL	N/A	130mg/dl	Infection in this patient caused a stress response in the body by increasing the production of cortisol and adrenaline. These hormones worked against the

				mechanism of insulin, as a result, increased the production of glucose. (Capriotti, 2020).
BUN	7-25 mg/dL	N/A	44mg/dl	Increased BUN levels in this patient are caused by kidneys not being able to filter urea from the blood completely. Heart failure and dehydration also cause high BUN levels. This patient has a history of heart failure. His immobility is also a cause of increased bun since he cannot ask for fluids when he is dehydrated. (Capriotti, 2020).
Creatinine	0.50-1.20mg/dL	N/A	3.07mg/dl	My patient's increased creatinine levels are caused by the urinary tract infection and damage of the kidney filters through either sepsis or UTI. (Capriotti, 2020).
Albumin	3.5-5.7 g/dL	N/A	3.2g/dl	Sepsis has damaged this patient's kidney filters, allowing albumin to leak from the blood into the urine, causing increased albumin in the urine and decreased albumin in the blood. (Capriotti, 2020).
Calcium	8.6-10.3 mg/dL	N/A	9.4mg/dl	N/A
Mag	1.6-2.6 mg/dL	N/A	2.3mg/dl	N/A
Phosphate	2.4-4.5 units/L	N/A	8.7units/l	Increased phosphate levels indicate the patient has kidney disease. My patient has sepsis and a urinary tract infection that could have caused kidney disease. Kidney disease impairs filtration of phosphate and others. (Capriotti, 2020).
Bilirubin	0.3-1.0 mg/dL	N/A	0.4mg/dl	N/A
Alk Phos	34-104 units/L	N/A	87unit/l	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	Yellow, clear	N/A	clear	N/A
pH	5.0-9.0	N/A	5.5	N/A
Specific Gravity	1.003- 1.013	N/A	1.006	N/A
Glucose	Negative	N/A	negative	N/A
Protein	Negative	N/A	3+	Increased protein is caused by sepsis traveling throughout the body and even the kidneys. Sepsis has damaged this patient's kidney filters, allowing albumin to leak from the blood into the urine. (Capriotti, 2020).
Ketones	Negative	N/A	trace	N/A
WBC	0.0-0.5	N/A	100	The patient's white blood cells are elevated because the patient has a urinary tract infection the body is fighting by creating more WBCs. (Capriotti, 2020).
RBC	4/HPF	N/A	100	Gross hematuria can be caused by a urinary tract infection in this patient. (Capriotti, 2020)**.**
Leukoesterase	Negative	N/A	4+	Leukoesterase indicates the presence of infection. The patient's urinary tract infection is causing abnormal leukoesterase levels (Capriotti, 2020).

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

Test	Normal	Value on	Today's	Explanation of Findings

	Range	Admission	Value	
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):

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

CT Brain/Head W/O Contrast: Completed on 1/23/2020

Indications: Frontal headache, dizziness, high blood pressure

Findings: Mild diffuse parenchymal volume loss and probably low density chronic cerebral white matter with microvascular changes. There was no evidence of extra-axial fluid collection, hemorrhage, mass, or evidence of acute infarct. The calvarium is intact. Minimal paranasal sinus mucosal thickening and the basilar flows are intact. The paranasal sinuses are well aerated.

Diagnostic Imaging Reference (1) (APA):

Capriotti, T. M. (2020). *Davis Advantage for Pathophysiology Introductory Concepts and Clinical Perspectives.* [FADavis]. Retrieved from https://fadavisreader.vitalsource.com/#/books/9781719641470/

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

Medications (5 required)

Brand/ Generic	Lorazepam/ Ativan	Morphine sulfate/Kadian	Ondansetron hydrochloride/ Zofran ODT	Magnesium hydroxide/ milk of magnesia	Acetaminophen/ Tylenol
Dose	0.5 mg	0.5 mg	4 mg	30ml	325 mg
Frequency	every two hours	every two hours	every eight hours	PRN	every four hours
Route	sublingual	sublingual	oral	oral	oral
Classification	antianxiety agents, anticonvulsant, amnestic, sedative. (Jones 2020)	Analgesic. (Jones 2020)	Antiemetic. (Jones 2020)	Antacid, antiarrhythmic, anticonvulsant, electrolyte replacement, laxative. (Jones 2020)	Antipyretic, nonopioid analgesic. (Jones 2020)

Mechanism of Action	"May potentiate the effects of gamma-aminobutyric acid (GABA) and other inhibitory neurotransmitters by binding to specific benzodiazepine receptors in cortical and limbic areas of CNS. GABA inhibits excitatory stimulation, which helps control emotional behavior. The limbic system contains highly dense benzodiazepine receptors, which may explain the drug's antianxiety effects. Also, lorazepam hyperpolarizes neuronal cells, thereby interfering with their ability to generate seizures" (Jones 2020).	"Binds with and activates opioid receptors (mainly mu receptors) in the brain and spinal cord to produce analgesia and euphoria" (Jones 2020).	"Blocks serotonin receptors centrally in the chemoreceptor trigger zone and peripherally at vagal nerve terminals in the intestine. This action reduces nausea and vomiting by preventing serotonin release in the small intestine (probable cause of chemotherapy and radiation-induced nausea and vomiting) and blocking signals to the CNS. Ondansetron May also bind to other serotonin receptors and two mu-opioid receptors" (Jones	"As a laxative, magnesium exerts a hyper somatic effect in the small intestine. It causes water retention that distends the bowel and causes the duodenum to secrete cholecystokinin. This substance stimulates fluid secretion and intestinal motility" (Jones 2020).	"Inhibits the enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system. Acetaminophen also acts directly on the temperature-regulating center in the hypothalamus by inhibiting the synthesis of prostaglandin E2" (Jones 2020).

			2020).		
Reason Client Taking	The patient takes lorazepam for anti-anxiety and restlessness because he is on hospice care.	for pain and air hunger.	The patient is taking this for nausea and vomiting.	the patient is taking this medication for Constipation	taken for mild pain and elevated temperatures.
Contraindications (2)	acute angle-closure glaucoma, hypersensitivity to lorazepam, intra-arterial delivery, psychosis. (Jones 2020)	acute or severe bronchial asthma in an unmonitored setting, respiratory insufficiency, increased intracranial pressure, arrhythmias. (Jones 2020)	Congenital long QT syndrome and hypersensitivity to ondansetron or its components. (Jones 2020)	hypersensitivity to magnesium salts or any element of magnesium-containing preparations, severe renal impairment, diverticulitis, hot block, myocardial infarction, coma. (Jones 2020)	hypersensitivity to acetaminophen or its members, severe hepatic impairment, severe active liver disease. (Jones 2020)
Side Effects/ Adverse Reactions (2)	anxiety, slurred speech, irritability, and blurred vision. (Jones 2020)	shock, psychosis, syncope, and unresponsiveness. (Jones 2020)	bronchospasms, abdominal pain, prolonged QT interval, wonder, and tachycardia. (Jones 2020)	confusion, hypertension, vomiting, muscle cramps, and paralysis.	Agitation, hypertension, stridor, abdominal pain, hypoglycemic coma, and peripheral edema. (Jones 2020)

Medications Reference (1):

Capriotti, T. M. (2020). *Davis Advantage for Pathophysiology Introductory Concepts and Clinical Perspectives.* [FADavis]. Retrieved from https://fadavisreader.vitalsource.com/#/books/9781719641470/

Jones, D.W. (2021). *Nurse's drug handbook.* (A. Bartlett, Ed.) (19th ed.). Jones & Bartlett Learning.

Assessment

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

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** **Braden Score:** **Drains present: Y☐ N ☐** **Type:**	
HEENT:	

Head/Neck: **Ears:** **Eyes:** **Nose:** **Teeth:**	.
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☐** **Edema Y ☐ N ☐** **Location of Edema:**	.
RESPIRATORY: **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character**	.
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☐** **Nasogastric: Y ☐ N ☐** **Size:** **Feeding tubes/PEG tube Y ☐ N ☐** **Type:**	.
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☐** **Dialysis: Y ☐ N ☐**	

Inspection of genitals: **Catheter: Y ☐ N ☐** **Type:** **Size:**	
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☐** **Fall Risk: Y ☐ N☐** **Fall Score:** **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:**	.
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):**	.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
7:40 AM	94	99 / 62	14	96.2	91

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
7:40 AM	**Pain ad**	**Unable to assess**	**3**	**Unable to assess**	**Unable to assess**

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
NPO	**150 ml with light brown sedimate**

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

Nursing Diagnosis • Include complete 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, goals and outcomes, modifications to plan.
Impaired comfort related to bed rest progressive	1. The patient is immobil	1. Provide Pain medication to ensure	1. The caregivers will observe	Family members will notice the difference in the patient’s posture

disease state and debilitating condition as evidenced by decreased performance, restlessness, and pressure ulcer.	e 24 hours every day and has a dorsal pressure ulcer that causes discomfort and pain.	comfort for the patient. Involve caregivers in identifying effective comfort measures for the patient: non-acidic fluids, oral swabs, lip salve, skin, perineal care, enema —the use of oxygen and suction equipment as appropriate. 2. Monitor for and discuss the possibility of changes in mental status, agitation, confusion, restlessness.	that the patient is no longer gripping the handrails but lying in a relaxed position without moaning. One 1hour after being given pain medication, the patient is more functional.	while lying down. They will see that patient is trying to engage with his caregivers and themselves. The patient's comfortability has increased.
1. Self-care deficit related to altered mental status due to sepsis as evidenced by immobility, inability	The patient's inability to perform self-care and daily activities.	1. Ensure the patient has a good amount of support with daily activities such as bathing, dressing, toileting, and ADLs. 2. turn the	1. After two weeks, the patient's pressure ulcer shows signs of healing. The patient will begin using the call light	1. the patient will express satisfaction with the care provided by developing a relaxed posture. Family members will express satisfaction with care by communicating their difference in the patient. The patient can perform some tasks alone.

to bathe, get dressed and perform toileting activities.		patient every 2 hours to prevent more pressure ulcers. Keep calling light within reach.	when needing help with anything.	

Other References (APA):

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

Concept Map (20 Points):

Subjective Data

Not Applicable

Objective Data

Vital signs: T 96.2 BP: 99/62, P: 94 R: 1
O2: 91%. Pain ad scale: Severity 3. Intake and output: Intake NPO and Output 150 ml with light brown sediments. CT Brain/ Head W/O Contrast: Completed on 1/23/2020
Findings: Mild diffuse parenchymal volume loss and probably low density chronic cerebral white matter with microvascular changes. There was no evidence of extra-axial fluid collection, hemorrhage, mass, or evidence of acute infarct. The calvarium is intact. Minimal paranasal sinus mucosal thickening and the basilar flows are intact. The paranasal sinuses are well aerated.

Client Information

CA
Age 75, Gender Male, Race Caucasian, Single, DNR, height 70.0 inches, Weight 148.4. Past medical history: urinary tract infection site not specified, periodic paralysis, myocardial infarction, heart disease, vitamin D deficiency unspecified, hypertension and weakness.

Nursing Diagnosis/Outcomes

Impaired comfort related to bed rest or immobility: progressive disease state/debilitating condition as evidenced by decreased performance, restlessness, and pressure ulcer.

Outcome: The caregivers will observe that the patient is no longer gripping the handrails but laying in a relaxed position without moaning. 1hour after being given pain medication the patient will be more functional.

Self-care deficit related to altered mental status due to sepsis as evidenced by immobility, inability to bathe, get dressed and perform toileting activities.

Outcome: After 2 weeks the patient's pressure ulcer will show signs of healing.
The patient will begin using the call light when needing help with anything

Nursing Interventions

Provide Pain medication to ensure comfort for the patient. Involve caregivers in identifying effective comfort measures for the patient: use of non-acidic fluids, oral swabs, lip salve, skin and perineal care, enema. The use of oxygen and suction equipment as appropriate.
Monitor for and discuss the possibility of changes in mental status, agitation, confusion, restlessness.
Ensure the patient has a good amount of support with daily activities such as bathing, dressing, toileting, and ADLs.
Turn the patient every 2 hours to prevent more pressure ulcers. Keep calling light within reach.