N431 Care Plan #2

Lakeview College of Nursing

Kenny Johnson

Demographics (3 points)

Date of Admission	Patient Initials	Age	Gender
10/19/21	KH	50	Female
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
Caucasian	Not on file (pt unconscious)	Divorced	Amphotericin B, Ketorolac, Morphine, Promethazine, and Amoxicillin
Code Status	**Height**	**Weight**	
Full Code	5’ 5”	118 lbs	

Medical History (5 Points)

Past Medical History: Anemia, left leg wound, leukocytosis, thrombocytopenia, acute kidney injury, pleural effusion, severe sepsis with septic shock, altered mental status, COPD, opioid abuse, and fibromyalgia.

Past Surgical History: Hysterectomy**.**

Family History: Not on file (Pt is unconscious).

Social History (tobacco/alcohol/drugs): Opioid abuse. Tobacco and alcohol history are not on file.

Assistive Devices: Ventilator, NG Tube, rectal tube, and urinary catheter.

Living Situation: Came from Kindred in Peoria**.**

Education Level: Not on file (Pt unconscious).

Admission Assessment

Chief Complaint (2 points): Tonic-Clonic seizures

History of present Illness (10 points):

KH was rushed to Carle from Kindred in Peoria with signs of shock and decreased mental status. KH was admitted and her mental status continued to deteriorate from AOX2 to AOX1. KH suffered a tonic-clonic seizure in the night. Altered mental status was not relieved while I was on

the unit. KH is on a ventilator but is breathing 5 breaths more than what the machine is set to, has a urinary catheter and rectal tube, and an NG tube for feedings. The doctor ordered a second MRI to look closer at KH's brain. KH's vital signs are stable with a pulse of 84, BP 128/82, respiratory rate of 20 on ventilator, 97.2 F, and 98% O2 saturation on a ventilator.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Paraneoplastic Limbic Encephalitis

Secondary Diagnosis (if applicable): N/A

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

Paraneoplastic limbic encephalitis (PNLE) is a rare neurological disorder that is associated with cancer. The cancerous tumor affects the limbic system structures that include the amygdala, hippocampus, and hypothalamus. The tumor changes how these structures interact which causes severe signs and symptoms that include; short-term memory loss, cognitive impairment, loss of consciousness, personality changes, and seizures. PNLE is commonly seen along with other health problems such as lung cancer (Budhram et al., 2019)

PNLE can be screened for using a blood test for monoclonal antibodies, but the absence of these does not mean that it is not PNLE. MRI scans of the brain can show temporal lobe abnormalities along with possible cancerous tumors. The treatment of PNLE includes the removal or treatment of the neoplastic tumor. If the cause is a viral infection, then an antiviral medication will be prescribed (Capriotti, 2020).

KH shows all the key signs of PNLE which include loss of consciousness, cognitive impairment, and seizures. Her MRI scans showed a neoplasm at the temporal lobe. The doctor

had my nurse Micah call her sister in order to give her the possible options. The doctor discussed with us how he thought surgery was the best option in this case.

Pathophysiology References (2) (APA):

Budhram, A., Leung, A., Nicolle, M. W., & Burneo, J. G. (2019). Diagnosing autoimmune limbic encephalitis. *Canadian Medical Association Journal*, *191*(19). https://doi.org/10.1503/cmaj.181548

Capriotti, C. T. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F.A. Davis Company.

Laboratory Data (15 points)

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	4-5.8	3.62	3.70	Past history of anemia (Hinkle & Cheever, 2018).
Hgb	12-16	10.2	10.6	Past history of anemia (Hinkle & Cheever, 2018)
Hct	32-54%	30.2	31.9	Past history of anemia (Hinkle & Cheever, 2018).
Platelets	150-400	135	148	Past history of thrombocytopenia (Hinkle & Cheever, 2018).
WBC	4.5-11	5.48	5.37	N/A
Neutrophils	1.6-7.7	2.01	2.05	N/A
Lymphocytes	1-4.9	1.42	1.03	N/A
Monocytes	0-1.1	0.5	0.3	N/A
Eosinophils	0-0.5	0.23	0.11	N/A
Bands	0	0.01	0.02	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-	135-145	140	144	N/A
K+	3.5-5.5	3.7	4.1	N/A
Cl-	98-108	102	107	N/A
CO2	22-28	19.0	22	Past history of COPD (Hinkle & Cheever, 2018).
Glucose	70-99	77	79	N/A
BUN	7-25	20	21	N/A
Creatinine	0.6-1.3	0.63	0.6	N/A
Albumin	3.5-5.2	1.8	2.0	Past history of acute kidney injuries (Hinkle & Cheever, 2018).
Calcium	8.6-10.1	9.6	10.0	N/A
Mag	1.6-2.6	1.9	1.7	N/A
Phosphate	2.4-4.5	N/A	N/A	N/A
Bilirubin	<1.5	0.2	0.4	N/A
Alk Phos	39-104	99	N/A	N/A
AST	10-30	10	N/A	N/A
ALT	10-40	12	N/A	N/A
Amylase	23-85	N/A	N/A	N/A
Lipase	0-160	N/A	N/A	N/A

Lactic Acid	0.5-2.2	N/A	N/A	N/A
Troponin	0.0-0.04	N/A	N/A	N/A
CK-MB	5-25	N/A	N/A	N/A
Total CK	22-198	N/A	N/A	N/A

Other Tests 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
INR	2-3	1.0	1.8	Taking lovenox (Jones and Bartlett Learning, 2019).
PT	9.6-11.8	N/A	N/A	N/A
PTT	30-40	34.4	N/A	N/A
D-Dimer	< = 250	N/A	N/A	N/A
BNP	< 100	N/A	N/A	N/A
HDL	> 60	N/A	N/A	N/A
LDL	< 130	N/A	N/A	N/A
Cholesterol	< 200	N/A	N/A	N/A
Triglycerides	< 150	N/A	N/A	N/A
Hgb A1c	4-5.6 non-diabetic	N/A	N/A	N/A
TSH	0.5-5	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	Straw-dark yellow, clear	Amber-clear	N/A	N/A

pH	4.5-8	5.0	N/A	N/A
Specific Gravity	1.005-1.035	1.023	N/A	N/A
Glucose	Negative	Negative	N/A	N/A
Protein	Negative	30	N/A	Catabolizing muscle from malnutrition prior to admission (Hinkle & Cheever, 2018).
Ketones	Negative	Trace	N/A	Catabolizing muscle from malnutrition prior to admission (Hinkle & Cheever, 2018).
WBC	Negative	Negative	N/A	
RBC	Negative	Negative	N/A	
Leukoesterase	Negative	Negative	N/A	N/A

Arterial Blood Gas 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
pH	7.35-7.45	7.35	7.35	N/A
PaO2	80-100	155.7	98	Past history of COPD (Hinkle & Cheever, 2018).
PaCO2	35-45	35.6	36.3	N/A
HCO3	22-28	19	23	Past history of COPD (Hinkle & Cheever, 2018).
SaO2	92-100	98.1	99	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	Negative	Negative	N/A
Stool Culture	Negative	N/A	N/A	N/A

Lab Correlations Reference (1) (APA):

K.P., T.P., & T.P. (2020). *Mosby's® Diagnostic and Laboratory Test Reference* (15th ed.). Mosby.

Hinkle, J. L., & Cheever, K. H. (2018). *Brunner & Suddarth's Textbook of Medical-Surgical Nursing* (14th ed.). Wolters Kluwer.

Diagnostic Imaging

All Other Diagnostic Tests (5 points): Lumbar puncture, bone marrow biopsy, and MRI.

Diagnostic Test Correlation (5 points): The lumbar puncture was performed in order to rule out meningitis since the patient showed symptoms of septic shock. A bone-marrow biopsy was done to look for suspecting cancer. An MRI was done to visualize the brain and its structures, more specifically the limbic structures of the brain (Hinkle & Cheever, 2018).

Diagnostic Test Reference (1) (APA):

Hinkle, J. L., & Cheever, K. H. (2018). *Brunner & Suddarth's Textbook of Medical-Surgical Nursing* (14th ed.). Wolters Kluwer.

Current Medications (10 points, 1 point per completed med)
10 <u>different</u> medications must be completed

Home Medications (5 required)

Brand/Generic	White petroleum eye ointment	Bisacodyl (Dulcolax)	Insulin Aspart (Novolog)	Chlorhexidine gluconate 12%	Famitodine (Pepcid)
Dose	Dime size amount	10 mg	Sliding Scale	15 mL	20 mg
Frequency	Q4H	Daily PRN	Q4H	Q12H	BID
Route	Topical	Suppository	Subcutaneous	PO	Gastric-tube
Classification	Eye prep. OTC	Laxative	Fast acting insulin	Dental Aid	Histamine H2-receptor inhibitor
Mechanism of Action	Prevents drying out of skin surrounding the eyes by moistening the skin.	Increases the activity of the intestines.	Insulin lowers blood glucose by increasing glucose uptake in the skeletal muscle and fat	Kills oral pathogens which prevents infections.	Reduces HCL formation by preventing histamine from binding to H2 receptors.
Reason Client Taking	Stuporous	Constipation	Type 2 diabetes	Stuporous and AOx1	Gastric hypersecretory condition.
Contraindications (2)	Wide angled glaucoma and known fungal infection of the eye	Intestinal obstruction or gastric bypass surgery.	Hepatic disease and hypokalemia	Lumbar puncture and breastfeeding	Hypersensitivity
Side Effects/Adverse Reactions (2)	Fungal infection and diaphoresis.	Constipation and diarrhea	Weight gain and hypoglycemia	Mouth irritation and tooth staining.	Arrythmias and erythema
Nursing Considerations (2)	Rub all the way in and be sure to not put too much on.	Mix with juice or water if the powder medication.	Give at the start of a meal and monitor for hyperglycemia	If possible, have patient spit afterword and suctioning will be needed.	Crush tablet and dilute with sterile water.

Key Nursing Assessment(s)/Lab(s) Prior to Administration	Check for facial edema.	Monitor electrolytes	Check blood glucose	Make sure pt has not had a recent lumbar puncture.	Make sure the patient is not allergic.
Client Teaching needs (2)	This ointment will help keep your skin from drying out.	Explain that the medicine is a suppository and describe the procedure before giving the medication.	Never share injection pens or needles and use within 28 days of being unrefrigerated	This keeps you from getting mouth infections. Swish with water after to keep from staining teeth.	Do not take with other acid reducing products.

Hospital Medications (5 required)

Brand/Generic	Protein (Beneprotein)	Enoxaparin (Lovenox)	Propofol (Diprivan)	Levetiracetam (Keppra)
Dose	14 g	40 mg	10 mg/mL	750 mg
Frequency	Q12H	Daily	Continuous	BID
Route	Gastric tube	Subcutaneous	IV	Gastric tube
Classification	Protein replacement	Heparin	Sedative-Hypnotic	Anticonvulsant
Mechanism of Action	Replaces protein in the body that is needed from a standard diet.	Inactivates clotting factors by binding with antithrombin III	Decreases cerebral blood flow.	Protects against secondary generalized seizure activity by preventing epileptiform burst firing.
Reason Client Taking	Low albumin and NG tube feeding instruction.	Prevent DVT	Sedation for the client who is mechanically ventilated	Seizures
Contraindications (2)	Hypernatremia and comatose patients	Heparin induced thrombocytopenia and hypersensitivity.	Hypersensitivity to eggs or soybeans.	Hypersensitivity
Side Effects/Adverse Reactions (2)	Water intoxication and dilution acidosis.	Pulmonary edema and thrombocytopenia	Bradycardia and hypotension	Pancreatitis and hypotension
Nursing Considerations (2)	Dilute with sterile water and administer solution into NG tube using syringe.	Don’t give IM and monitor for spinal hematoma if spinal puncture while concurrently	Avoid continuous use an use cautiously in patients with heart disease.	Monitor for allergic reactions and monitor for seizure activity.

		taking.		
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Make sure the NG tube is properly placed.	PT and INR	Monitor LOC and respirations	Level of consciousness and seizure activity
Client Teaching needs (2)	Protein replacement needed due to malnutrition.	NSAIDS can increase bleeding risk	Do not drive a car while taking this medication.	Can become dizzy and drowsy.

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2019). *2020 Nurse's drug handbook* (19th ed.). Jones & Bartlett Learning.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** AOx1 **Orientation:** Stuporous **Distress:** No acute distress **Overall appearance:** Disheveled	The patient does not open her eyes on her own or talk. She is only able to move when painful stimulus is applied.
INTEGUMENTARY (2 points): **Skin color:** Pink **Character:** Slightly clammy **Temperature:** Warm **Turgor:** Normal without tenting **Rashes:** No rashes **Bruises:** Both left and right arms from previous seizures. **Wounds:** Left leg wound and neck wound from previous PICC line. **Braden Score:** 9 (High risk) **Drains present: Y☐ N ☒** **Type: N/A**	Skin is pink, warm, and slightly clammy with a normal turgor, no rashes, bruising to forearms bilaterally from past seizures, a left leg wound, and a neck wound from a past PICC line. KH has a Braden score of 9 which is considered high risk.
HEENT (1 point): **Head/Neck:** Normal. Facial edema is present. **Ears:** Normal **Eyes:** PERRLA bilaterally, no exudate, pink	Facial edema and no teeth.

conjunctiva, sclera is white. **Nose:** Sinus is midline **Teeth:** Only gums are left	
CARDIOVASCULAR (2 points): **Heart sounds:** Normal S1 and S2 without rubs, murmurs, or gallops. **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** NSR **Peripheral Pulses:** 2+ bilaterally **Capillary refill:** less than 3 seconds. **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☒ N ☐** **Location of Edema:** Face	Normal S1 and S2 sounds without murmurs, gallops, or rubs at an NSR. Facial edema is present. Cap refill is less than 3 seconds and peripheral pulses are 2+ bilaterally at all pulse sites.
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	Breath sounds are normal, as the patient is mechanically ventilated.
GASTROINTESTINAL (2 points): **Diet at home:** **Current Diet:** NPO, Tube feedings only **Height:** 5’ 5” **Weight:** 118 lbs **Auscultation Bowel sounds: normoactive** **Last BM:** 10/27/21 **Palpation: Pain, Mass etc.:** No pain, masses, or nodules to note. **Inspection:** **Distention: None to note** **Incisions:** Past scars **Scars:** Hysterectomy incision scars **Drains:** none to note **Wounds:** none to note **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☒ N ☐** **Size:** 18 **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	NPO and tube feedings only. Normoactive bowel sounds with last BM on 10/27/21. Scars present from previous hysterectomy. KH has a size 18 NG tube.
GENITOURINARY (2 Points): **Color:** Amber-clear **Character:** Normal **Quantity of urine:** 200 mL **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒**	200 mL of amber-clear urine in the indwelling urinary catheter bag.

Inspection of genitals: **Catheter: Y ☒ N ☐** **Type:** Indwelling **Size:** 12 F	
MUSCULOSKELETAL (2 points): **Neurovascular status:** Altered and stuporous **ROM:** Passive only **Supportive devices:** N/A but bedbound **Strength:** +0 bilaterally **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score:** 60 **Activity/Mobility Status:** **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk** ☐	KH has altered neurovascular status and is stuporous. She only has passive ROM, has +0 strength bilaterally, and is bedbound. She requires ADL and mobility assistance and is a high fall risk with a score of 60.
NEUROLOGICAL (2 points): **MAEW: Y ☐ N☒** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** AOX1 **Mental Status:** Altered mental status **Speech:** No speech **Sensory:** Can feel pain stimuli evidenced by movement upon stimulation. **LOC:** Stuporous	Patient does not move extremities but had PERLA bilaterally. Strength is equal at +0 of all extremities. Mental status is altered along with not speech. KH is stuporous but responds to painful stimuli with limited movement.
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** opioids **Developmental level:** N/A **Religion & what it means to pt.:** N/A **Personal/Family Data (Think about home environment, family structure, and available family support):** Sister is listed on file and was to be called when I was leaving the unit.	Patient abused opioids to cope with stress. KH's sister is listed on file and was to be called in to answer more personal details for the chart. She was called to come in as I was leaving the unit.

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0900	78	122/85	25 (ventilator	97.6	99% on

			set to 20)		ventilator
1030	84	128/82	20 (ventilator set to 20)	97.2	98% on ventilator

Vital Sign Trends: Trend in vitals is normal this morning with a period of respirations that exceeded what the mechanical ventilator is set to. This is a sign that the patient is able to breathe on their own sporadically.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0900	RASS	Arm	-2	Movement upon sternal rub with eye open for less than 10 seconds.	N/A
1030	RASS	Arm	-2	Movement upon sternal rub with eye open for less than 10 seconds.	N/A

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 20 g **Location of IV:** Left AC **Date on IV:** 10/26/21 **Patency of IV:** Easily flushable **Signs of erythema, drainage, etc.:** No signs of drainage, erythema, bleeding or edema. **IV dressing assessment:** Clean, dry and intact	NS 125 mL/Hr

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
1,175 mL	250 mL

Nursing Care

Summary of Care (2 points)

Overview of care: Transferred from Kindred in Peoria, full work up, and admission to CCU from the ED.

Procedures/testing done: CBC, urinalysis, MRI, bone marrow biopsy, and lumbar puncture.

Complaints/Issues: Stuporous with breathing impairment

Vital signs (stable/unstable): Stable with assisted devices

Tolerating diet, activity, etc.: Rectal tube and urinary catheter

Physician notifications: Surgery is best option.

Future plans for patient: Possible surgery to have neoplasm

Discharge Planning (2 points)

Discharge location: Not discussed with sister since patient is unconscious.

Home health needs (if applicable): Full care home health nurse.

Equipment needs (if applicable): Hoyer, catheter, ventilator, etc.

Follow up plan: Not discussed with sister since the patient is unconscious.

Education needs: Not discussed with sister since the patient is unconscious.

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis and listed in order of priority

Nursing Diagnosis	Rational	Intervention (2 per dx)	Evaluation
• Include full	• Explain		• How did the patient/family

nursing diagnosis with "related to" and "as evidenced by" components	why the nursing diagnosis was chosen		respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Risk for trauma related to previous altered level of consciousness as evidenced by previous tonic-clonic seizures, diagnosis of fibromyalgia, and loss of muscle coordination.	The patient had a tonic-clonic seizure and has little control of muscles and muscle coordination.	1. Seizure precautions **2.** Administer prescribed anticonvulsant.	• The patient will not suffer a trauma from a seizure episode.
2. Risk for decreased cardiac output related to mechanical ventilation as evidenced by mechanical ventilator set to 20 when the average is 14-16.	The respiratory therapist in training came in and messed with the mechanical ventilator. The provider asked why it was up so high and turned it down.	1. Assess the client's BP, pulse, and level of consciousness. 2.Monitor fluid balance and urine output	• Patient will maintain adequate cardiac output, as evidenced by systolic BP within 20 mm Hg of baseline; HR to 60 to 100 beats per minute with regular rhythm.
3. Risk for impaired skin integrity related to altered mental state as evidenced by	KH is bedbound and is unable to move positions on her own. She has a	1. Turn every two hours 2. Position with pillows and wedges in order to keep bony prominences from touching bed.	• The patient will not develop a pressure ulcer and will be turned every two hours.

bedbound, stuporous, and high risk Braden score of 9.	Braden score of 9 which is considered high risk.		
4. Risk for ineffective protection related to ventilator associated pneumonia as evidenced by mechanical ventilator dependency.	KH is on a mechanical ventilator long-term so she is at risk for developing ventilator associated pneumonia.	**1.**Assess arterial blood gasses and oxygen saturation. **2.** Keep the head of the bed elevated, wash hands before and after suctioning, and use chlorhexidine based rinses to decrease the spread of respiratory pathogens.	• KH will remain free of injury as evidenced by proper ventilator settings and arterial blood gases (ABGs) within normal limits for client. • KH will have a decreased potential for injury from barotrauma and ventilator-associated pneumonia (VAP) by continuous assessments and early interventions.

Other References (APA):

Concept Map (20 Points):

Subjective Data

"Surgery is the best option" – Dr.

Nursing Diagnosis/Outcomes

ND: Risk for trauma
Objective: The patient will not suffer a trauma from a seizure episode.

ND: Risk for decreased cardiac output
Objective: Patient will maintain adequate cardiac output as evidenced by BP within 20 mm Hg of baseline and HR between 60-100 with NSR.

ND: Risk for impaired skin integrity
Objective: The patient will not develop a pressure ulcer and will be turned every two hours.

ND: Risk for ineffective protection
Objective: The patient does not acquire ventilator associated Pneumonia.

Objective Data

MRI shows neoplasm near limbic structures
Braden: 9
Neck wound from past PICC line
Left leg wound
Mechanical ventilation (set to 20)
NG Tube
AOx1
Rectal tube
Urinary catheter
Hgb: 10.6
Hct: 31.9
Plt: 140

Patient Information

KH
50
Fibromyalgia
Septic shock
Stuporous
Opioid abuse
Paraneoplastic Limbic Encephalitis

Nursing Interventions

Seizure precautions

Assess the client's BP, pulse, and level of consciousness.

Monitor fluid balance and urine output

Administer prescribed anticonvulsant.

Turn every two hours

Position with pillows and wedges

Assess arterial blood gasses and oxygen saturation.

Keep the head of the bed elevated, wash hands before and after suctioning, and use chlorhexidine based rinses to decrease the spread of respiratory pathogens.