N311 Care Plan #3

Lakeview College of Nursing

Kaitlyn N. Holycross

Demographics (5 points)

Date of Admission 10/19/2020	**Patient Initials** JJT	**Age** 62 years old (8/5/1958)	**Gender** Female
Race/Ethnicity White/Caucasian	**Occupation** Disability. Was an OB nurse	**Marital Status** Married	**Allergies** Gluten Meal- No severity, unknown reaction. Vancomycin Hcl- Low severity, Rash
Code Status No CPR (no ACP docs). DNR, daughter bedside	**Height** 5'2" (157.5cm)	**Weight** 184 lbs (83.7 kg)	

Medical History (5 Points)

Past Medical History: She has had A-fib (HCC), anemia, cervical cancer (HCC), debility, depression, diabetes mellitus (HCC), DVT (HCC), high cholesterol, hypertension, incontinence of bowel, incontinence of urine, insomnia, neuropathy, sepsis (HCC), ulcer of heel due to diabetes (HCC).

Past Surgical History: Lumbar fusion, debridement decubitis excision closure (left, 10/26/219); Leg debridement (left, 10/29/2019); Foreign body removal (left, 10/26/2019); Cardiac catherization (NA, 6/5/2020); Incision and drainage (bilateral, 6/5/2020).

Family History: Diabetes on mothers side. No information on fathers side.

Social History (tobacco/alcohol/drugs): No tobacco use. No smokeless tobacco use. Current alcohol abuse. No drug use.

Admission Assessment

Chief Complaint (2 points): Dysuria started yesterday. (urinary catheter problem)

History of present Illness (10 points):

Patient came into the hospital with a chief complaint of dysuria (UTI). However, the patient was taken by ambulance to the hospital and was then diagnosed with sepsis. The patient rode with her daughter over the hospital by ambulance from the patients home where the husband called for help. Her symptoms were worsening and her mental state was being affected leading her husband to call the ambulance. The patient mentioned “I do not remember the ride to the hospital, it was in and out of consciousness”. The patient has multiple pressure ulcers (decubitus ulcers), and a UTI. All of which her immune system tried to fight off which resulted in sepsis. Her ulcers are being carefully cleaned and having the bandages changed on them every day to insure it does not worsen. Sepsis is a result of an imbalance of chemicals that are released to fight off an infection. These chemicals being imbalanced can cause sepsis. UTI’s can cause urosepsis which is caused by bacteremia (bacterial endotoxins in the blood). The patient is no longer in pain or a disoriented state of mind. Her pressure wounds are being taken care of, as well as antibiotics. The organism is unspecified therefore, general antibiotics are given.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Sepsis without acute organ dysfunction due to an unspecified organism.

Secondary Diagnosis (if applicable): Decubitus ulcers.

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

This patient was diagnosed with sepsis without acute organ dysfunction. Sepsis is also known as septicemia. According to the Davis Advantage Pathophysiology Textbook sepsis is “an infection that begins locally, and through hematogenous spread, it becomes a body-wide infection that overwhelms the immune system and causes severe multiorgan compromise”.

Sepsis is taken very seriously because it could be life-threatening. It causes inflammation throughout the body. The body responds to the infection by releasing chemicals into the bloodstream. Sepsis is a result of these chemicals going out of balance which triggers changes that can damage multiple organs. This patient has not yet experienced any of her organs being affected by it as of right now. General signs and symptoms of sepsis include fever or hypothermia, as well as alterations in one's mental state. Any other symptoms a person might experience depends on where on the body, and what the sepsis has affected. Fatigue, dizziness, Shortness of breath, cough, headache, neck stiffness, dysuria, abdominal pain, flank pain, general pain or tenderness, fever, and chills are all possible symptoms which vary upon each case. In this persons case, she has multiple pressure ulcers and has had a Foley catheter for many years. All of these are at high risk for infection which could result in sepsis. According to the CDC, people most at risk are "those who are 65 years of age or older, people with weakened immune systems, children younger than one, sepsis survivors, or people with chronic medical conditions such as diabetes, lung disease, cancer, and kidney disease". This patient falls under multiple high risk categories including age, weakened immune system due to chemo and radiation, and diabetes. Different blood tests, X-ray's, urinalysis, gram stain of blood, culture and sensitivity of blood, sputum, purulence, and urine, ultrasonography or CT, and other diagnostic testing can be done to see if someone has sepsis. It is important to go and seek medical attention if an infection appears because it could turn into sepsis. Respiratory help, IV fluids, medications such as vasoconstrictors and blood pressure support, and broad-spectrum antibiotics unless gram stain is performed and finds out what type of organism is causing it, can all be forms of treatment. Each case of treatment is different because each case of sepsis is different. Severe sepsis can lead into septic shock. Septic shock according to Davis Advantage Pathophysiology Textbook is

"septicemia with vascular instability; widespread capillary permeability and hypotension. Widespread arterial vasodilation throughout the body causes shock". Septic shock is essentially when sepsis progresses to the point of multiple organ systems failing. The body goes into shock like it would in a major accident or trauma. The patient would also experience very low blood pressure and abnormalities in the cellular metabolism. Septic shock is why immediate medical attention is important with sepsis.

Pathophysiology References (2) (APA):

Page 1175:

Capriotti, T. (2020). *Davis Advantage for Pathophysiology: Introductory Concepts and Clinical Perspectives (2nd edition).* Philadelphia: F.A. Davis.

CDC: *Centers for Disease Control and Prevention.* (August 27, 2020). https://www.cdc.gov/sepsis/what-is-sepsis.html

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	4.40-5.80x10^6/mcL	3.82	NA	Could be vitamin B6, B12, or folate deficient. Poor nutrition (malnourished). Possible internal bleed.
Hgb	13.0-16.5g/dL	8.6	NA	Anemia
Hct	38.0-50%	27.5	NA	Vitamin or mineral deficiency. Insufficient supply of RBC (anemia). Leukemia or lymphoma. Large number of WBC due to infection or illness
Platelets	140-440x10^3	436	NA	
WBC	4.00-12.00x10^3/mcL	5.70	NA	
Neutrophils	40.0- 68.0%	68.2	NA	Can point to infection or injury, but her number is not that far off from normal range so it is most likely okay. Would be due to sepsis.
Lymphocytes	19.0-49.0%	17.3	NA	Infection or illness (most likely due to sepsis and ulcers**.**
Monocytes	100-700	10.0	NA	Bloodstream infection, chemo/radiation
Eosinophils	0.0- 6.0	0.20	NA	
Bands	0-500	NA	NA	

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-	134-145mEq/L	139	NA	
K+	3.6-5.2	3.7 mmol/L	NA	
Cl-	98-107mEq/L	107 mmol/L	NA	
CO2	23- 29	28 mmol/L	NA	
Glucose	70-100	234 mg/dL	NA	Pt is diabetic and just had eaten a popsicle and grape juice.

BUN	7-20	7 mg/dL	NA	
Creatinine	0.6-1.3	0.25 mg/dL	NA	Potentially due to lower mass caused by disease or aging. Liver disease or a very low protein diet can also lower it
Albumin	3.4-5.4	2.3 g/dL	NA	Inflammation shock. Malnutrition. Crohns or celiac disease
Calcium	8.7-10mg/ dL	9.5	NA	
Mag	1.7-2.2	1.9	NA	
Phosphate	3.4-4.5	NA	NA	
Bilirubin	0.1-1.2	0.2	NA	
Alk Phos	20-130	91 U/L	NA	

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	Yellow/cloudy	NA	Cloudy from UTI
pH	5.0-9.0	5.0	NA	
Specific Gravity	1.003-1.030	1.013	NA	
Glucose	Negative	3+	NA	Vomiting/diarrhea. Substances such as sugar or protein in urine
Protein	Negative	2+	NA	Kidney disease can be a cause
Ketones	Negative	3+	NA	Went some time without eating so she probably burned some fat which causes the production of ketones. This happens when cells don't get enough glucose
WBC	Neg, 0-5/hpf	21-50	NA	Inflammation in urinary tract or kidneys (pt has a UTI)
RBC	Neg, 0-2/hpf	51-150	NA	Infection in urinary tract, bladder, kidneys, or prostate

Leukoesterase	0-5 WBC	NA	NA	

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		NA		
Blood Culture		NA		
Sputum Culture		NA		
Stool Culture		NA		

Lab Correlations Reference (APA):

Capriotti, T. (2020). *Davis Advantage for Pathophysiology: Introductory Concepts and Clinical Perspectives (2nd edition).* Philadelphia: F.A. Davis.

MedlinePlus. (2020). *MedlinePlus: U.S National Library of Medicine.* https://medlineplus.gov/

Medscape. (2020). *Medscape*. https://reference.medscape.com/

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

-Xr chest single view portable Result date: 10/25/2020. The heart size is upper limits of normal to borderline enlarged. Pulmonary vascularity's are within normal limits. There is a 0.6 cm

nodule density in the right lower lung. It is unchanged as far back as 10/20/19. Recommended another follow-up study in 6 months to ensure continued stability. No new infiltrates or consolidation is identified.

-Xr Foot 3 or more view bilateral result date 10/20/20. Impression; Findings suspicious for osteomyelitis of the left calcaneum with overlying ulceration. Multiple fractures are seen in the right foot. Diffuse osteopenix the bones is noted.

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

Medications (5 required)

Brand/Generic	Ferrous Sulfate tablet	Folic acid (Folvite)	Gabapentin (Neurontin)	Insulin glargine (Lantus 100 unit/mL injection)	Melatonin
Dose	325 mg	1 mg	300 mg	20 units	3 mg
Frequency	Daily	Daily	2 times daily	2 times daily	Nightly
Route	Oral	Oral	Oral	Subcutaneous	Oral
Classification	Type of iron	B complex vitamin	Anticonvulsants	Insulin	Sleep aid
Mechanism of Action	Iron combines with porphyrin and globin chains to form hemoglobin, which is critical for oxygen	An exogenous source of folate is required for nucleoprotein synthesis and the maintenance of normal erythropoiesi	Has no direct GABAergic action and does not block GABA uptake or metabolism. Gabapentin blocks the tonic phase of nociception induced by	Like other types of insulin, the primary action of insulin glargine is to regulate glucose metabolism. Insulin	The secretion of melatonin increases in darkness and decreases during exposure

	delivery from the lungs to other tissues	s. Folic acid, where given by mouth or parenterally, stimulates the production of red blood cells, white blood cells, and platelets in persons suffering from certain megaloblastic anemias	formalin and carrageenan, and exerts a potent inhibitory effect in neuropathic pain models of mechanical hyperalgesia and mechanical/thermal allodynia.	glargine lowers the blood glucose concentration by stimulating glucose uptake especially by muscle and fat. It also inhibits hepatic glucose production.	to light, thereby regulating the circadian rhythms of several biological function, inkling the sleep-wake cycle by chemically causing drowsiness and lowering he body temperature
Reason Client Taking	Anemia	Low folate and certain types of anemia	Neuropathy	Diabetes	Insomnia
Contraindications (2)	Hemolytic anemia Ulcerative colitits	Pernicious anemia Renal disease	Myasthenia gravis Chronic kidney disease	Hepatic disease Diabetic ketoacidosis	Bleeding disorders Depression
Side Effects/Adverse Reactions (2)	Constipation Dark stools	Abdominal cramps Diarrhea	Drowsiness Dizziness	Rash over whole body Fast heartbeat	Dizziness Nausea

Medications Reference (APA):

2020 Nurse's Drug Handbook (9th edition). (2020). Burlington, MA, MA: Jones & Bartlett Learning.

NCBI. (2020). NCBI: *National Center for Biotechnology Information.* https://www.ncbi.nlm.nih.gov/

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** Alert **Orientation:** Oriented x4 **Distress:** No acute distress **Overall appearance:** Clean, bathed, and combed hair	Pt could use a hair wash but she was going home and wanted to shower then
INTEGUMENTARY: **Skin color:** Pink, with a little natural color. Pt is fair skinned which is proper for her race **Character:** Dry **Temperature:** Warm **Turgor:** Normal skin turgor, hydrated **Rashes:** Small rash where catheter rubbed on skin **Bruises:** Extensive black, purple, and slightly yellow colored bruise covering dorsal surface of hand up to her wrist on right hand. **Wounds:** Ulcers in heels of feet, and a very bad one on her bottom. Developing a few other in early stages **Braden Score:** 8 **Drains present: Y☐ N ☒** **Type:**	Pt does not know how she got her large bruise on her left hand, she thinks it might have happened when she was not very alert in the ambulance transport. Ulcers present on left and right heel. Ulcer on right lateral malleolus, right buttock. No oozing, drainage, or bleeding.
HEENT: **Head/Neck:** Symmetrical, no lumps on head, no palpable lymph nodes **Ears:** Good condition upon inspection, no obvious drainage and could respond well (no obvious hearing troubles) **Eyes:** Blue eyes. Overall, white, clear, no drainage, no irritation, passed PERRLA and ROM, symmetrical **Nose:** No deviated septum, symmetrical upon inspection **Teeth:** Teeth are in good condition, have a slight yellow tinge, teeth are straight	Oral cavity seemed dry Pt has glasses, but does not wear them

CARDIOVASCULAR: **Heart sounds:** Clear, no palpitation or irregularity, no murmurs detected **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** NA **Peripheral Pulses:** Strong, easy to find **Capillary refill:** Good, less than 3 seconds **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	.
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character** Breath sounds clear, no crackles, no rhonchi, no wheezing, no difficulty breathing, breaths were symmetrical	.
GASTROINTESTINAL: **Diet at home:** Low carb diet with fruits, vegetables. Does not like protein all that well. **Current Diet:** Low carb due to diabetes **Height:** 5'2" **Weight:** 184 lb **Auscultation Bowel sounds:** Clear bowel sounds **Last BM:** At 0800 when performing wound care **Palpation: Pain, Mass etc.:** **Inspection:** Normal **Distention:** Normal **Incisions:** None present **Scars:** Some scars **Drains:** **Wounds:** None visible **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	BMI is >40 Pt mentioned that the movement from doing wound care causes her to have a bowel movement
GENITOURINARY: **Color:** Yellow/Cloudy **Character:** pH is 5.0 **Quantity of urine:** 150 mL **Pain with urination: Y ☐ N ☒**	No pain with urination because of catheter and no feeling below the waste. Urine is cloudy from UTI due to the catheter. Pt has permanently had a catheter for years since neuropathy started. It progressively got worse

Dialysis: Y ☐ N ☒ **Inspection of genitals:** **Catheter: Y ☒ N ☐** **Type:** Foley catheter **Size:** 2500 max	until she has no feeling in her lower limbs after her cancer treatment. Pt could not remember how many years but mentioned her husband changes her catheter at home. Pt had small amount of blood when perineum care was done, nurse said it was due to her catheter rubbing and making her bleed.
MUSCULOSKELETAL: **Neurovascular status:** No pain, not pale, pulse is good, paralysis in lower limbs **ROM:** Full range of motion in upper body. Right arm got a little tired and because it has been sore **Supportive devices:** Hoyer lift is a tool that is trying to be assigned to her at home **Strength:** Good strength in upper limbs, no movement in lower limbs. **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score:** 30 **Activity/Mobility Status:** Not mobile **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk**☐	Pt never got out of bed with any assistive device when I was there. Since she has no feeling in lower limbs, she is completely dependent. Pt can assist in rolling over with her core.
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☐ N ☒ if no - Legs ☒ Arms ☐ Both ☐** **Orientation:** Effective at communicating. Talked a lot and was very open about children and her life **Mental Status:** Seemed very good, still very knowledgeable about nursing and being a teacher, told a lot of stories and communicated well. Never complained during wound care either **Speech:** Speaks clear English **Sensory:** Aware **LOC:** Fully aware	Neuropathy caused by chemo and radiation according to the patient. She has no feeling from the waist down.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** Taking a nap **Developmental level:** Appropriate for age **Religion & what it means to pt.:** Catholic. Goes to church but can't right now due to	.

Covid. **Personal/Family Data (Think about home environment, family structure, and available family support):** She has support from husband and 7 children. She has 10 grandchildren as well, all of which she stays in touch with. She is primarily taken care of by her son and husband. Her oldest daughter is always there for her if something happens.	

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1200	82	101/67	20	98.1	100

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1130	1 (occasional buttocks pain)	Bottom	Not bad	Dull	Waits until it subsides

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
4 ounces of grape juice and a red popsicle at 0530. Ordered a late breakfast/lunch when I was leaving for the day.	150 mL of urine. Bowel movement at 0800 when moved during wound care**.**

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

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Risk for infection: Pt has a risk of infection from Foley catheter and ulcers. Catheters are a "highway" for bacteria to go straight up the urethra. UTI's are a major risk and can lead to sepsis. Keeping sterility when inserting the catheter, and proper perineal care can help prevent infection. Also, her ulcers or "bed sores" are open and prone to getting worse and developing infection if bandages are not changes properly or	The nursing diagnosis for risk of infection is chosen because pt has already been diagnosed and currently being treated for sepsis. Making sure it does not get worse or occur again means eliminating causes for infection. Her two main causes for infection are pressure ulcers from paralysis of the lower limbs, and also a Foley catheter since she cannot use the restroom on her own.	**1.** Rotate the pt, and keep the patients ulcers clean and monitor progress **2.** Keeping sterility when inserting the catheter, and proper perineal care can help prevent infection. Making sure pt wipes front to back and keeping the area as clean as possible.	The goal would be to have the antibiotics work to get rid of the UTI. Another goal would be to keep rotating the patient so the pressure ulcers do not get worse/preventing new ones. Also, changing and cleaning the bandages will hopefully help heal her bedsores. Sterility and proper hygiene are big factors with both taking care of the Foley, and the ulcers. "The patient states "I have not experienced anymore infections which could lead to the return of sepsis"

regularly.			
2. Sedentary lifestyle: Due to the pt not being able to move or feel the lower half of her body, she is prone to bed sores, infection, and DVT's. Making sure the pt moves positions multiple times a day, or allowing the Hoyer to lift her to a different place could be beneficial.	The diagnosis for the pt is sepsis which is a result of infection from UTI and pressure ulcers. Pt has also had a past of DVT which could lead to a pulmonary embolism. The pt cannot tell when her foot is dropped and creating another ulcer. Therefore, moving her positions is important	1. Rotate pt several times a day to different sides 2. Use the Hoyer that the hospital is trying to supply her at her house. Allowing her to move even from the bed to the couch can help with blood flow and preventing ulcers frim worsening or developing more	The goal is to make sure the pt receives the Hoyer for her home. This makes transportation easier since her husband who usually lifts her, is getting older and unable. The goal is to allow for movement multiple times a day for proper blood flow and prevention of bed sores Pt says "I feel like I am preventing potential problems to the best of my ability which is good for my overall health. (mental and physical)

Other References (APA):

Swearingen, P.L., & Wright, J.D. (2019*). All-in-one nursing care planning resource:* Medical-Surgical, Pediatric, Maternity, and Psychiatric- Philadelphia, Missouri: Elsevier Health Sciences

Concept Map (20 Points):

Subjective Data

Pt reported pain in buttocks
Patient was at a pain level of 1 when I interviewed her
Pt mentioned slight discomfort in her hand which was bruised
Patient was ready to go home and be discharged

Nursing Diagnosis/Outcomes

Patient was diagnosed with sepsis without acute organ dysfunction. This means the sepsis has not affected her organ systems yet. Severe symptoms from sepsis was experienced with impaired mental status. Patient has urinary incontinence from Foley catheter due to paralysis in lower body. Patient has diabetes as well which led to pressure ulcers along with immobility. Hopefully patient with be treated from sepsis and will be able to prevent the reoccurrence or worsening of it. Hopefully the pt will manage diabetes and continue to rotate positions to prevent more ulcers.

Objective Data

Patient was diagnosed with sepsis that was without an acute organ dysfunction
Patient was taking antibiotics for UTI which was involved in her chief complaint
Patient had Foley catheter due to paralysis in lower limbs
Patient had many pressure ulcers, the worse one being on her buttock

Patient Information

Patient is a 62 year old femal. She is 184 lbs, and is 5'2". Patient has been diagnosed with sepsis without acute organ dysfunction due to an unspecified organism. Patient is diabetic, has multiple pressure ulcers, has a UTI, and has paralysis of the lower body

Nursing Interventions

The proper interventions would have been to treat the sepsis. To administer fluid, antibiotic, and any other interventions needed to support. Maintaining sterility and cleaning Foley catheter and perineum area is important to prevent another UTI. Doing regular wound care and assessing each ulcer during the process will ensure the proper methods are used in order to heal them. Rotating the pt will help prevent new ulcers and allow the existing ones to heal. Lastly, proper education and maintaining healthy glucose levels are important for future health.