N311 Care Plan #4

Lakeview College of Nursing

Hannah Considine

Demographics (5 points)

Date of Admission 3/28/21	**Patient Initials** C.S	**Age** 84	**Gender** Male
Race/Ethnicity Caucasian	**Occupation** Retired	**Marital Status** Widowed	**Allergies** Penicillin
Code Status Full	**Height** 5'11"	**Weight** 286lbs	

Medical History (5 Points)

Past Medical History:

CAD status post CABG, obstructive sleep apnea, proximal A-fib, history of colonic polyps post colectomy, A-flutter status post ablation

Past Surgical History:

Ablation of dysrhythmic focus, CABG, colonoscopy, tonsillectomy

Family History:

Mother and father both have a history of heart issues

Social History (tobacco/alcohol/drugs):

Pt. denies any alcohol, drug use, or tobacco use of any kind

Admission Assessment

Chief Complaint (2 points):

Transferred for further care

History of present Illness (10 points):

Pt. arrived at Crawford Hospital with a fever of 102 F, chills, shaking, and a general feeling of sickness. He had redness of the LLE 3 days prior to his arrival to the E.R. They found him to septic while he was there. They started the pt. on vancomycin after his blood cultures. On 3/28/21 the pt. went into A-fib with RVR and sepsis secondary to cellulitis of the LLE. Pt.

denied any prior history of blood clots or cellulitis prior to this encounter. He was transfer to Carle for further care.

Primary Diagnosis

Primary Diagnosis on Admission (3 points):

Cellulitis of LLE

Secondary Diagnosis (if applicable):

A-fib with RVR

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

Cellulitis is a very common bacterial skin infection. If cellulitis is left untreated it can lead to serious life-threatening complications. Cellulitis mainly affects the lower extremities but can present in other parts of the body as well.

Cellulitis is an acute skin infection of the dermis or subcutaneous layer of the skin. It usually happens because of damage to the skin such as a cut, bite, or other type of wound. As this infection spread it cans cause fever, erythema, and lymphangitis. People with conditions such as diabetes, immunodeficiencies, and impaired circulation are at higher risk of developing it (*Cellulitis: Advances in Skin & Wound Care,* 2020). Cellulitis in older patients are more likely to develop thrombophlebitis (*Cellulitis: Advances in Skin & Wound Care,* 2020). As the bacteria inters the open area it overwhelms the defensive cells (neutrophils, eosinophils, basophils, and mast cells) that normally contain and localize inflammation and cellular debris accumulates. As cellulitis progresses, the organism invades tissue around the initial wound (*Cellulitis: Advances in Skin & Wound Care,* 2020).

Some signs and symptoms of cellulitis are, red area of skin that tends to expand, swelling, tenderness, pain, warmth, fever, red spots, blisters, and skin dimpling (Mayo clinic, *Cellulitis* 2020). There are many diagnostic tests to determine the presence of cellulitis such as, white blood cell count, erythrocyte sedimentation rate, gram stain and culture of fluid from abscesses and bulla, culture of primary lesion by biopsy or aspiration, "Touch" preparation—skin lesion specimen touched to microscopic slide; application of KOH; examination for yeast and mycelial forms of fungus (*Cellulitis: Advances in Skin & Wound Care,* 2020). Treatment for cellulitis includes oral or IV antibiotics, warm soaks to the site to relieve pain and decrease edema, pain medication as needed, and elevation of infected extremity (*Cellulitis: Advances in Skin & Wound Care,* 2020). Prevention of cellulitis includes washing the wound daily with soap and water, applying protective cream and ointment to affected area, covering the wound with a bandage and watching for skins of infection (Mayo clinic, *Cellulitis,* 2020).

Pathophysiology References (2) (APA):

Reprinted with permission from Lippincott Williams & Wilkins. Source: Anatomical Chart Company. Atlas of Pathophysiology. Springhouse. (n.d.). *Cellulitis : Advances in Skin & Wound Care*. LWW. https://journals.lww.com/aswcjournal/fulltext/2003/07000/cellulitis.15.aspx.

Mayo Foundation for Medical Education and Research. (2020, February 6). *Cellulitis*. Mayo Clinic. https://www.mayoclinic.org/diseases-conditions/cellulitis/symptoms-causes/syc-20370762#:~:text=Cellulitis%20(sel%2Du%2DLIE,face%2C%20arms%20and%20other%20areas.

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	3.90-4.98	4.66	4.37	
Hgb	12.0-15.5	13.8	12.6	
Hct	35-45	42.3	39.8	
Platelets	140-400	140	157	
WBC	4.0-9.0	16.84	10.13	Could be high due to patient having cellulitis/infection (Martin et al., 2021)
Neutrophils	1.5-8.0	12.80	7.05	Could be high due to patient having cellulitis/infection (Martin et al., 2021)
Lymphocytes	20-40%	14.7	18.0	Could be low due to an infection (Martin et al., 2021)
Monocytes	2-8%	8.0	8.7	Could be high due to an infection (Martin et al., 2021)
Eosinophils	1-4%	0.3	2.9	
Bands		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-	135-145	137	141	
K+	3.5-5.0	3.8	4.0	
Cl-	98-107	105	109	Levels are slightly elevated. This could be due to being a little dehydrated. (Martin et al., 2021)

CO2	22-29	27.7	29.4	Abnormal results may indicate that your body has an electrolyte imbalance, or that there is a problem removing carbon dioxide through your lungs. (Martin et al., 2021)
Glucose	70-110	98	106	
BUN	6-20	20	16	
Creatinine	0.50-1.00	1.17	0.98	Levels could be elevated due to dehydration (Martin et al., 2021)
Albumin	3.5-5.2	3.0	N/A	Low levels could be due to an inflammatory disease like cellulitis (Martin et al., 2021)
Calcium	8.4-10.5	8.4	9.0	
Mag	1.7-2.2	1.9	N/A	
Phosphate		N/A	N/A	
Bilirubin		N/A	N/A	
Alk Phos		70	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		N/A	N/A	
pH		N/A	N/A	
Specific Gravity		N/A	N/A	
Glucose		N/A	N/A	
Protein		N/A	N/A	
Ketones		N/A	N/A	
WBC		N/A	N/A	

RBC		N/A	N/A	
Leukoesterase		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		N/A	N/A	
Blood Culture		N/A	N/A	
Sputum Culture		N/A	N/A	
Stool Culture		N/A	N/A	

Lab Correlations Reference (APA):

Martin, P., By, -, Martin, P., & Paul Martin is a registered nurse with a bachelor of science in nursing since 2007. Having worked as a medical-surgical nurse for five years. (2021, March 29). *Normal Laboratory Values for Nurses: A Guide for Nurses*. Nurseslabs. https://nurseslabs.com/normal-lab-values-nclex-nursing/.

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

PTT (24.6)

A PTT test is a blood test that will help us determine the patients ability to form blood clots. The patient falls below the normal range of 24-35 seconds which puts them at risk for blood clots (Prothrombin time test, 2020)

INR (2.2)

An INR goes hand and hand with the PTT test to determine the patients ability to form clots. Normal ranges for this test varies. For normal people not taking anticoagulants the range is 1.1 or below and for those taking an anticoagulant like Warfarin it's 2.0 to 3.0 (Prothrombin time test, 2020).

EKG (A-fib with RVR)

EKG's measure the hearts electrical signals. This test revealed that the patient was in A-fib with RVR which is when rapid ventricular response causes the ventricles also beat too fast. These beats are too weak to push enough blood out of the heart to your lungs and body (*Atrial Fibrillation (AFib) With Rapid Ventricular Response (RVR)*).

Diagnostic testing references (APA):

Mayo Foundation for Medical Education and Research. (2020, December 8). *Prothrombin time test*. Mayo Clinic. https://www.mayoclinic.org/tests-procedures/prothrombin-time/about/pac-20384661#:~:text=In%20healthy%20people%20an%20INR,in%20the%20leg%20or%20lung.

WebMD. (n.d.). *Atrial Fibrillation (AFib) With Rapid Ventricular Response (RVR)*. WebMD. https://www.webmd.com/heart-disease/atrial-fibrillation/afib-rapid-response.

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

Medications (5 required)

Brand/Generic	Warfarin/ Coumadin	Vancomycin/ Vancocin	Lisinopril/ Prinivil	Metoprolol/ Toprol-XL	Pantoprazole/ Protonix
Dose	3mg	1,750mg	5mg	25mg	40mg
Frequency	Everyday @1600	267.5 mL/hr	Daily	Daily	Daily before breakfast
Route	Oral	IVPB	Oral	Oral	Oral
Classification	Anticoagulant	Vanco antibiotic	Antihypertensive	Beta-adrenergic blocker	Proton pump inhibitor
Mechanism of Action	Interferes with the liver's ability to synthesize vitamin K dependent clotting	Inhibits bacterial RNA and cell wall synthesis: alters permeability of bacterial membranes,	May reduce blood pressure by inhibiting conversion of angiotensin I to angiotensin II.	Inhibits stimulation of beta-receptors sites, located mainly in the heart,	Inteferes with gastric acid secretion by inhibiting the hydrogen-potassium-adenosine

	factors, depleting clothing factors II (prothrombin), VII, IX, AND IX.	causing cells death		resulting in decreased cardiac excitability, cardiac output, and myocardial oxygen demand.	triphosphate enzyme system, or proton pump, in gastric parietal cells
Reason Client Taking	To prevent clots	To treat infection	To treat hypertension	To treat hypertension	Treats GERD
Contraindications (2)	Bleed and bleeding tendencies, cerebral or dissecting aneurysm	Hypersensitivity to corn or corn products, hypersensitivity to vancomycin or it's components	Concurrent aliskiren use in patients with diabetes or patients with renal impairment, hereditary or idiopathic angioedema	Acute heart failure, cardiogenic shock	Concurrent therapy with rilpivirine containing products, hypersensitivity to pantoprazole
Side Effects/Adverse Reactions (2)	Coma, hypotension	C-diff, acute kidney injury	Stevens-Johnson syndrome, angioedema	CVA, arrhythmias	Hepatic failure, Leukopenia

Medications Reference (APA):

Jones & Bartlett Learning. (2020). *Nurse's drug handbook.*

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	 Pt. A&O x4 Pt. appeared well groomed and nourished No distress noted, pt. was very pleasant and friendly
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	 White Dry Warm Normal skin turgor Localized No bruises noted LLE cellulitis, slightly weeping **Braden: 19** (Pt. able to move themselves in bed and is able to verbalize any pain or discomfort they are in. Pt. is able to use urinal on their own, and is able to call to use the bathroom for BM's)
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	 Head and neck symmetrical. No tracheal deviation. Thyroid rises and falls appropriately. Lymph nodes non-palpable. No hearing deficit note. Ears pink with no drainage noted. Pupils equal (3mm), round, reactive to light and accommodation. Symmetrical EOMs. Conjunctiva pink, no irritation noted. Sclera white. Nose had a small growth in left nostril. Septum intact and no plops noted. Pt. has good oral care, no natural teeth. Dentures are in good condition.
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:**	 Normal S1, and S2 sound noted. No S3 or S4, sounds noted +2 radial pulses, +1 dorsal pulses >Than 3 seconds Edema with weeping noted in the LLE
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	 Diminished breath sounds in all regions

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:**	Pt. states "I just eat a regular diet at home. This diet isn't bad though" Cardiac 5'11" 286lbs Bowel sounds present in all 4 quadrants Pt states "This morning" Upon palpation pt. states "My right side is a little tender". No masses were noted though No distension. Stomach is round No incisions Scar on chest and right side of stomach No drains No wounds noted
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	 Yellow No odor or sediment noted 770 mL Pt. did say "Sometimes it's hard for me to empty my urine" Genitals appeared normal
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** ☐	 Normal Pt. able to preform ROM with no assistance Pt. uses a cane to walk Pt. has good grip strength and foot plantar and dorsiflexion strength **Fall score: 11** (Moderate fall risk) due to age, patient care equipment, and mobility issues.
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐**	Pt. able to move all extremities without assistance. Pupils are equal, round, reactive to light and accommodation. Pt. is A&O x4.

Strength Equal: Y ☒ N ☐ if no - Legs ☐ Arms ☐ Both ☐ **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Cognitive with normal speech pattern. Normal sensory response in fingers and toes. Pt. mental status normal for their age.
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):**	Pt. explained to me that he was widowed but he met a woman a few years ago and they now live with each other. He seemed very fond of her and it seemed like they had a good partnership with one another. Pt. expressed interest in speaking with a catholic priest while I was in the room.

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0830	77 bpm	132/79 mmHg	20	98.2 F	96% RA

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1040	Numerical	N/A	0/10	N/A	N/A

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
100% of meal, 600mL	770 mL urine

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 related to skin wounds as evidence by severe inflammation of LLE	I chose this nursing diagnosis because my patient has opening in the skin due to having cellulitis and this can cause an infection	**1.** Assess for signs of infection. This includes fever, chills, redness and tenderness of effected area **2.** Encourage the patient to use appropriate hygiene methods and get help with ADL's as needed to make sure they are getting clean properly	I explained to the patient that he should have looked into getting care sooner than the 3 days that he had waited especially since he has a fever, chills and redness of his leg. I educated him that those are all signs and symptoms of cellulitis. I alsi explained the importance of good hygiene, especially to breaks and openings in the skin. My desired outcome would be patient's WBC coming back into normal level and skin returning to normal color instead of red and inflamed.
2. Risk for skin impaired skin integrity related to cellulitis as evidenced by weakening of the skins structure	I chose this nursing diagnosis because my patient has cellulitis which can cause the skin become weaker than normal due to swelling of the extremity. Cellulitis can cause pain, and this can make the patient want to move less due to pain.	**1.** After bathing, make sure my patient is patting any weak areas of skin dry, rather than rubbing it, which can facilitate skin break down. I will also make sure that my patients bedding and clothing are free of wrinkles which can cause unnecessary	Since the patient does most of their ADL's on their own, I need to make sure that they know who to assess their skin properly and know what areas they should be a little more gentle with while drying off. I also educated the patient on keeping their legs elevated and the pt. stated that he had already been educated on that and tries to do it when possible.

		pressure points. **2.** Make sure my patient is keeping their lower extremities elevated when possible to promote venous return, which can cut down on the risk of DVT's, and lessen edema due to having cellulitis	My desired outcome would be to keep improving the integrity of the skin throughout the patients stay in the hospital and to make sure the patient continues to do so when they are discharged home.

Overall APA format (5 points):

Concept Map (20 Points):

Subjective Data

Pt. denied any prior history of blood clots or cellulitis prior to this encounter.

Pt. had chills when arriving to the ER

"My right side is a little tender".

"Sometimes it's hard for me to empty my urine"

Nursing Diagnosis/Outcomes

Risk for infection related to skin wounds as evidence by severe inflammation of LLE

My desired outcome would be patient's WBC coming back into normal level and skin returning to normal color instead of red and inflamed.

Risk for skin impaired skin integrity related to cellulitis as evidenced by weakening of the skins structure

My desired outcome would be to keep improving the integrity of the skin throughout the patients stay in the hospital and to make sure the patient continues to do so when they are discharged home.

Objective Data

PTT (24.6)
INR (2.2)
EKG (A-fib with RVR)
Elevated WBC count
Elevated neutrophils
Decreased lymphocytes
Elevated monocytes
Edema of the lower extremities

Patient Information

Pt. is a Caucasian 84 year old male that was transferred to Carle hospital from Crawford hospital for further care related to cellulitis and A-fib with RVR

Nursing Interventions

tenderness of eff

2.
Encourage the patient to use appropriate hygiene methods and get help with ADL's as needed to make sure they are getting clean properly

1.
After bathing, make sure my patient is patting any weak areas of skin dry, rather than rubbing it, which can facilitate skin break down. I will also make sure that my patients bedding and clothing are free of wrinkles which can cause unnecessary pressure points.

2.
Make sure my patient is keeping their lower extremities elevated when possible to promote venous return, which can cut down on the risk of DVT's, and lessen edema due to having cellulitis