N311 Care Plan 2

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Lakeview College of Nursing

N311: Foundations of Professional Practice

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Demographics (5 points)

Date of Admission 09/29/2024	**Client Initials** C.P.	**Age** 66	**Gender** **Male**
Race/Ethnicity Caucasian	**Occupation** Retired; formerly with city sewage department	**Marital Status** Married	**Allergies** No Known
Code Status Full	**Height** 5’8”	**Weight** 102Kg	

Medical History (5 Points)

Past Medical History: Atrial flutter with rapid ventricular response, congestive heart failure, colon polyp, gastroesophageal reflux disease, hepatitis C, chronic obstructive pulmonary disorder, hypertension, obstructive sleep apnea, coronary atherosclerosis of native coronary artery

Past Surgical History: Pt states he had ocular surgery related to lazy eye as a child, and as an adult had a 5-way heart bypass, an atrial fibrillation ablation, and right heart catheterization.

Family History: Heart disease x3 brothers, father, and mother.

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): Patient reports history of cigarette use, but states that he quit approximately 10 years ago. Similarly, reports heavy drinking in past, but denies current alcohol use. Denies current drug use.

Admission Assessment

Chief Complaint (2 points): Lower extremity swelling and pain.

History of Present Illness – OLD CARTS (10 points):

Pt states that his initial onset of cellulitis began approximately 10-15 years ago. Condition affects lower extremities from knees to ankles, bilaterally. Flare ups tend to last 1-2 weeks, often require urgent care or hospital intervention to fully address. Condition is characterized by pain, loss of function, and impairment of independent activities of daily living. Identifies skin color changes,

irritation, opening of wounds, and presence of clear weeping visible drainage as additional characteristics he is able to observe during these exacerbations. Notes that he can anticipate episodes by monitoring his weight daily and attempts management of condition by adjusting his fluid intake in response to observed weights. Fluid intake, particularly alcohol, have been significant aggravating factors, as well as associated weight gain from excess intake. Pain medication and attempts to manage fluid intake are the only things that provide relief, which are therefore his primary attempts for self-treating condition.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Cellulitis of leg

Secondary Diagnosis (if applicable): Severa anemia

Pathophysiology

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

CAUSATION

Cellulitis is a bacterial infection initiating at the site of an injury on a subject's skin. It is precipitated primarily by one (or both) of two kinds of bacteria - Staphylococcus Aureus and Streptococcus Pyogenes (Rrapi et al., 2019). While S. Pyogenes is not a typical part of the body's natural bacterial flora, S. Aureus can be with many individuals. A Cellulitis infection is set off by these bacterial agents finding a portal of entry through an existing skin break or wound along the surface of the prospective host. While cellulitis may occur in any such surface-level injury, it is most often seen with the distal extremities, particularly in the legs. This is because in a normal health individual with adequate circulation, these agents may not succeed in penetrating the immuno-defenses of the body. But with those who’s wounds owe their existence in some part to disorders effecting their immune system, their peripheral circulation quality, or their generalized

skin integrity – these bacteria have a much easier time compromising the body's protective mechanisms. For example, circulatory disorders like peripheral artery disease (PAD) or Diabetes Mellitus (DM) possess impaired blood characteristics that impair healing and immunity, making wounds not only more likely, but more vulnerable in general to infection (Brown et al, 2019). Moreover, dermatological disorders that cause tissue breakdown like eczema, psoriasis, as well as those with chronic complications from severe burn wounds, can act like frequent cracks in the body's armor and leave frequent openings for bacterial penetrance. Therefore, these bacteria act as opportunistic infections, leveraging these exposures that make an individual more susceptible to their invasion. Once they have taken root, these bacterial cells excrete various toxins which strip away the surface layer and further degrade skin integrity and leave the body even more open to contamination.

SIGNS AND SYMPTOMS

The chief complaint associated with cellulitis is severe pain. Wounds or skin irritations are never pleasant- but the presence of either widespread raw patches, or numerous, progressive, proliferative, inflamed, and infected wounds can be extremely agonizing. These wounds are often visibly inflamed, palpably warm and swollen, tender to contact, and demonstrate a red irritated discoloration (Capriotti, 2024). In severe cases that possess significant associated swelling of the extremity - blisters will form with weeping fluids. These may also be purulent in the most extreme of presentations. Additional symptoms a patient may experience are associated with the body's attempts to stave off the infection, such as fevers, chills, and generalized fatigue or weakness.

DIAGNOSTICS

Cellulitis is a highly visible and on-the-surface issue, which aids in its identification. But

true confirmation will require some testing. Blood draws can be taken to provide samples for testing. Results of this may demonstrate elevated white blood cell counts which indicates the presence of an infection. Elevated neutrophils would be suggestive of significant inflammation. Lactate levels can be assessed, and if high may denote acidosis, which can be indicative of sepsis, which would suggest the patient is approaching a critical stage for intervention efforts. Moreover, these blood specimens can then provide lab cultures and sensitivity testing where the bacteria present can be grown in a controlled environment to allow for identification, and subsequently the selection of an appropriate antibiotic agent to combat it with. In some extremes, imaging may even be brought into play if wound care presents significant concerns about wound extent or depth, and to observe potential abscesses that have resulted.

TREATMENT

With the bacteria identified, and the wound(s) fully assessed, restorative efforts commence. In the mildest cases a patient may be able to remain at home and resolve the situation with oral antibiotics and pain medications. Often, however, individuals with cellulitis, as discussed before, possess significant comorbidities that both precipitated the infection and continue to exacerbate the healing effort of it. As such, hospitalization with a course of IV antibiotics may be necessary. In these cases, the client may also require the services of wound care to continue to keep the infection under control, the surrounding areas clean, and minimize additional bacterial colonization. In either scenario, management of both pain and swelling are tantamount to patient comfort. While both will be treated with appropriate medications, swelling may also require consideration to positioning and use of specialized stockings to assist in reduction or minimalization of swelling accumulation distally in extremities. Aside from the principal presenting issues of cellulitis, hospital care will also emphasize management of the

underlying contributing factors, such as those we discussed earlier – disorders of the skin, circulatory system, and immune system. These factors will likely remain as influencers of subsequent episodes of cellulitis, and the subject may experience additional infections. Care to keep any and all wounds clean and underlying elements under control will be necessary to minimize the likelihood of recurrence.

Pathophysiology References (2) (APA):

Capriotti, T. (2024). *Davis Advantage for Pathophysiology* (3rd ed.). F. A. Davis Company. https://bookshelf.vitalsource.com/books/9781719650533

Rrapi, R., Chand, S., & Kroshinsky, D. (2021, May 28). *Cellulitis: A review of pathogenesis, diagnosis, and Management.* Medical Clinics of North America. https://www.sciencedirect.com/science/article/abs/pii/S002571252100047X

Brown, B. D., & Hood-Watson, K. L. (2019, November 21). *Cellulitis*. Europe PMC. https://europepmc.org/article/NBK/nbk549770

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1505	92	120/79	20	97.5	93

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1505	**0-10**	**Bilateral legs**	**8/10 right leg 4/10 left leg**	**Burning, "like needles deep into my legs"**	Rn notified; pain medications administered

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
720 mL oral: water	980 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 • 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. Acute pain	Cellulitis is characterized by very painful leg wounds. Pain must be addressed for patient comfort, psychological stress, and quality of life.	**1.** Using a pain flowchart, record the time of medication administration and results of pain assessment every hour until the next dose to monitor the therapy's effectiveness	**1. Patient will develop a plan for pain control**	Goal not met. The patient was not satisfied with the dosage the nurse provided and despite his reported pain he refused to take this dosage. Patient reports he will only accept a dose twice this size. Patient claims this is what he takes at home. RN notified physician to provide a report

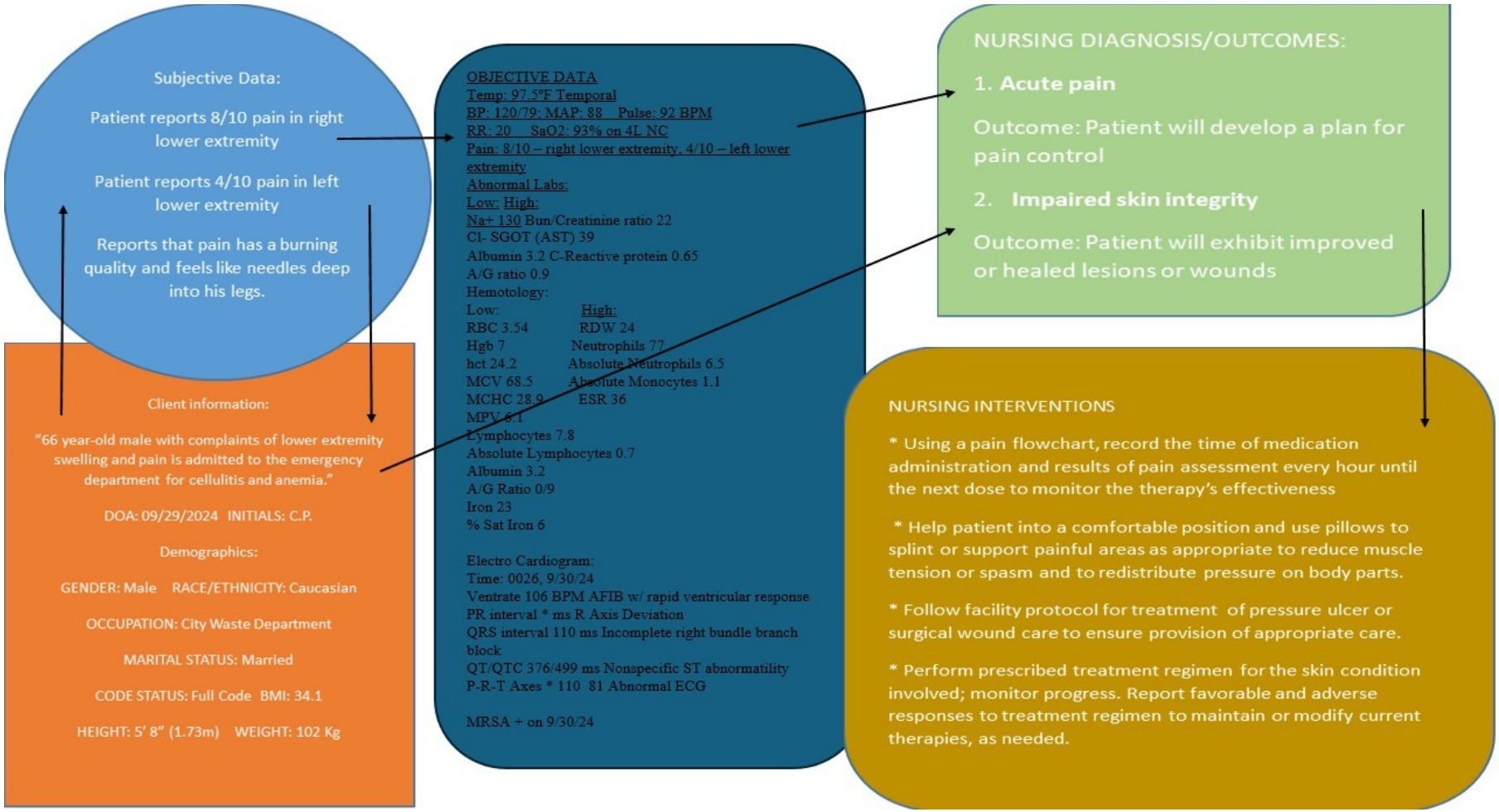
		2. Help patient into a comfortable position and use pillows to splint or support painful areas as appropriate *to reduce muscle tension or spasm and to redistribute pressure on body parts.*		of this exchange and was investigating patient medications history at the end of shift. Ongoing.
2. Impaired skin integrity	The wounds on the legs must be addressed to resolve the problem and potential for additional infections.	**1.** Follow facility protocol for treatment of pressure ulcer or surgical wound care *to ensure provision of appropriate care.* **2.** Perform prescribed treatment regimen for the skin condition involved; monitor progress. Report favorable and adverse responses to treatment regimen *to maintain or*	**1. Patient will exhibit improved or healed lesions or wounds**	Goal not met. Goal not attainable before end of shift. Hospital staff will continue to work with the patient to address this. Ongoing problem.

		modify current therapies, as needed.		

Other References (APA):

Phelps, L. L. (2023a). *Nursing diagnosis reference manual* (12th ed.). Wolters Kluwer.

Concept Map (23 Points):


Subjective Data:
Patient reports 8/10 pain in right lower extremity
Patient reports 4/10 pain in left lower extremity
Reports that pain has a burning quality and feels like needles deep into his legs.
Client information:
"66 year-old male with complaints of lower extremity swelling and pain is admitted to the emergency department for cellulitis and anemia."
DOA: 09/29/2024 INITIALS: C.P.
Demographics:
GENDER: Male RACE/ETHNICITY: Caucasian
OCCUPATION: City Waste Department
MARITAL STATUS: Married
CODE STATUS: Full Code BMI: 34.1
HEIGHT: 5' 8" (1.73m) WEIGHT: 102 Kg
OBJECTIVE DATA
Temp: 97.5°F Temporal
BP: 120/79; MAP: 88 Pulse: 92 BPM
RR: 20 SaO2: 93% on 4L NC
Pain: 8/10 – right lower extremity. 4/10 – left lower extremity
Abnormal Labs:
Low: High:
Na+ 130 Bun/Creatinine ratio 22
Cl- SGOT (AST) 39
Albumin 3.2 C-Reactive protein 0.65
A/G ratio 0.9
Hemotology:
Low: High:
RBC 3.54 RDW 24
Hgb 7 Neutrophils 77
hct 24.2 Absolute Neutrophils 6.5
MCV 68.5 Absolute Monocytes 1.1
MCHC 28.9 ESR 36
MPV 6.1
Lymphocytes 7.8
Absolute Lymphocytes 0.7
Albumin 3.2
A/G Ratio 0/9
Iron 23
% Sat Iron 6
Electro Cardiogram:
Time: 0026, 9/30/24
Ventrate 106 BPM AFIB w/ rapid ventricular response
PR interval * ms R Axis Deviation
QRS interval 110 ms Incomplete right bundle branch block
QT/QTC 376/499 ms Nonspecific ST abnormatility
P-R-T Axes * 110 81 Abnormal ECG
MRSA + on 9/30/24
NURSING DIAGNOSIS/OUTCOMES:
1. Acute pain
Outcome: Patient will develop a plan for pain control
2. Impaired skin integrity
Outcome: Patient will exhibit improved or healed lesions or wounds
NURSING INTERVENTIONS
* Using a pain flowchart, record the time of medication administration and results of pain assessment every hour until the next dose to monitor the therapy's effectiveness
* Help patient into a comfortable position and use pillows to splint or support painful areas as appropriate to reduce muscle tension or spasm and to redistribute pressure on body parts.
* Follow facility protocol for treatment of pressure ulcer or surgical wound care to ensure provision of appropriate care.
* Perform prescribed treatment regimen for the skin condition involved; monitor progress. Report favorable and adverse responses to treatment regimen to maintain or modify current therapies, as needed.