N311 Care Plan 4

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Lakeview College of Nursing

N311: Foundations of Professional Practice

Professor Smalley

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Demographics (5 points)

Date of Admission 10/12/2023	**Client Initials** J.S	**Age** 41	**Gender** Female
Race/Ethnicity Caucasian	**Occupation** CNA	**Marital Status** Single	**Allergies** No known allergies
Code Status Full Code	**Height** 5'4"	**Weight** 216 lbs	

Medical History (5 Points)

Past Medical History: The client's past medical history includes Diabetes Mellitus, Elevated Blood Pressure, Acute Duodenitis, Gastric Outlet Obstruction, Anxiety, and Depression.

Past Surgical History: The client's past surgical history includes a left leg open fasciotomy on 10/13/23, a gastric tube placement on 10/24/2, an appendectomy in 2014, and a cesarean section in 2006.

Family History: The client has no family history on file but stated that her mother had a history of high blood pressure and that her father had a history of high blood pressure and diabetes. She also said that both of her grandfathers had lung cancer and lung disease.

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): The client has been a cigarette smoker for 22 years and smokes a quarter of a pack a day. She denies use of alcohol and any recreational drugs.

Admission Assessment

Chief Complaint (2 points): The client presented to the emergency room with sudden onset pain in her left lower leg she described as "extreme burning and sharp pain in my calf."

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

The client presented to the emergency room on 10/12/23 with complaints of severe, burning, leg pain in her left calf. She said that the pain had begun suddenly earlier that day at work when she was just walking down the hallway. The client denied having any falls or previous injury to the left calf. She also stated that the pain has stayed isolated to just her left calf. The pain was constant and at times an "extra sharp pain would come and go." The client described the pain as a "throbbing and burning" pain so severe that she could hardly even walk and that her leg felt "as hard as a rock." The client said that trying to walk made the pain even worse. When asked if anything helped to alleviate the pain the client stated that nothing helped the pain, "not even laying down." Upon further evaluation the client was medically diagnosed with compartment syndrome and received a left open leg fasciotomy on 10/13/23. The client has never experienced this type of leg pain before. She is still in a great deal of pain post-operation, but stated that "since surgery, keeping my leg up helps the pain."

Primary Diagnosis

Primary Diagnosis on Admission (3 points): The client's primary medical diagnosis was nontraumatic compartment syndrome of the left lower extremity.

Secondary Diagnosis (if applicable): This client had no secondary medical diagnosis.

Pathophysiology

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

This client received a medical diagnosis of nontraumatic compartment syndrome which was localized to her left calf. Compartment syndrome is a very painful condition that can occur

when extreme pressure builds up within the muscles (American Academy of Orthopaedic Surgeons, 2022). The reason that it is called compartment syndrome is because different muscles, nerves, and blood vessels within the arms and legs are grouped together in different compartments (American Academy of Orthopaedic Surgeons, 2022). For example, the area between the knee and ankle has four different compartments called the superficial posterior, deep posterior, anterior, and lateral compartments (American Academy of Orthopaedic Surgeons, 2022). Covering these compartments is a tissue called the fascia whose purpose is to hold everything together and in place, so it is not very flexible (American Academy of Orthopaedic Surgeons, 2022). Therefore, compartment syndrome can occur when bleeding or excess swelling occurs within one of these compartments and because the fascia cannot stretch very well, high pressure can build up on the blood vessels, muscle, and nerves in the compartment (American Academy of Orthopaedic Surgeons, 2022). This high pressure causes the collapse of blood vessels which decreases both arterial supply and venous return and results in waste products building up in the area (Capriotti, 2020). The increased pressure also impinges on nerves which affects the motor ability of the muscle and can result in the patient complaining of extreme pain (Capriotti, 2020). Compartment syndrome can be acute or chronic (Capriotti, 2020). Acute compartment syndrome typically develops as the result of a severe injury like a bone fracture, crush injury, or really bad bruise (American Academy of Orthopaedic Surgeons, 2022). It is rarely caused from just a minor injury (American Academy of Orthopaedic Surgeons, 2022). Acute compartment syndrome is considered a medical emergency and requires a surgical fasciotomy or permanent disability and tissue death can occur (Capriotti, 2020). Chronic compartment syndrome is less serious and is usually exercised induced from doing repetitive motions and is reversible with rest (American Academy of Orthopaedic Surgeons, 2022).

Compartment syndrome can occur in any muscle compartment, but the most common place it happens is the anterior compartment of the calf (American Academy of Orthopaedic Surgeons, 2022). Signs and symptoms of compartment syndrome include burning, tingling, or numb sensations (American Academy of Orthopaedic Surgeons, 2022). The muscle will likely feel very tight and full and the pain can be very intense and is more intense than you would suspect from the injury itself (American Academy of Orthopaedic Surgeons, 2022). The pain is usually made worse when trying to walk or stretch (American Academy of Orthopaedic Surgeons, 2022). There may also be visible swelling of the muscle (American Academy of Orthopaedic Surgeons, 2022). To diagnose compartment syndrome the doctor may use a device to measure the pressure of the affected area and if it is greater than 30mmHg then the patient will get a clinical diagnosis of compartment syndrome (American Academy of Orthopaedic Surgeons, 2022). X-rays and MRIs may also be ordered to visualize the affected area (American Academy of Orthopaedic Surgeons, 2022).

Pathophysiology References (2) (APA):

Capriotti, T. (2020). Chapter 37: Musculoskeletal Trauma. In *Davis Advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed., p. 936). F.A. Davis.

American Academy of Orthopaedic Surgeons. (2022, May). *Compartment Syndrome* . OrthoInfo. https://orthoinfo.aaos.org/en/diseases--conditions/compartment-syndrome/#:~:text=Compartment%20syndrome%20develops%20when%20swelling,and%20nerve%20cells%20is%20disrup

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	4.4-5.8 10(6)/mcL	4.77 10(6)/mcL	4.02 10(6)/mcL	
Hgb	13.0-16.5 g/dL	13.6 g/dL	11.5 g/dL	This client likely has low hemoglobin related to hemorrhage (blood loss) during her fasciotomy to treat her compartment syndrome (Pagana et al., 2023).
Hct	38.0%-50.0%	41.4%	34.6%	This client likely has low hematocrit levels related to hemorrhage (blood loss) during her fasciotomy to treat her compartment syndrome (Pagana et al., 2023).
Platelets	140-44 10(3)/mcL	360 10(3)/mcL	367 10(3)/mcL	
WBC	4-12 10(3)/mcL	19.1 10(3)/mcL	12.9 10(3)/mcL	WBCs can elevate due to inflammation, stress, and trauma to the tissue (Pagana et al., 2023). Her WBC is therefore likely elevated due to the surgical wound on her left calf from her fasciotomy.
Neutrophils	40.0%-68.0%	71.3%	64.7%	
Lymphocytes	19.0%-49%	19.1%	22%	
Monocytes	3.0%-13%	6.0%	9.7%	
Eosinophils	0.0%-8.0%	3.0%	3.2%	
Bands	0-5%	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-	136-145 mmol/L	135 mmol/L	137 mmol/L	Her sodium levels are just slightly decreased and this could be due to a third space loss of sodium related to

				her slight peripheral edema (Pagana et al., 2023).
K+	3.5-5.1 mmol/L	4.7 mmol/L	4.0 mmol/L	
Cl-	98-107 mmol/L	107 mmol/L	106 mmol/L	
CO2	22-30 mmol/L	21 mmol/L	24 mmol/L	Her CO2 level is just slightly low and this could be due to slight metabolic acidosis or possibly that the vial of blood was slightly underfilled allowing some CO2 to escape the serum (Pagana et al., 2023).
Glucose	70-99 mg/dL	117 mg/dL	103 mg/dL	Her increased glucose level is likely due to her diagnosis of diabetes mellitus (Pagana et al., 2023).
BUN	8-20 mg/dL	21 mg/dL	13 mg/dL	Her BUN level was slightly elevated upon admission and this was likely due to dehydration due to the pain she was in (Pagana et al., 2023).
Creatinine	0.7-1.3 mg/dL	1.02 mg/dL	0.90 mg/dL	
Albumin	3.5-5.0 g/dL	4.4 g/dL	4.0 g/dL	
Calcium	8.7-10.5 mg/dL	11.4 mg/dL	10.5 mg/dL	Similarly, to BUN, increased calcium levels can indicate that at person is dehydrated and this was likely the case with this client (Pagana et al., 2023).
Mag	1.7-2.2 mg/dL	1.4 mg/dL	N/A	Her magnesium level was low and this was likely because she takes insulin and insulin is a medication that can lower magnesium levels (Pagana et al., 2023).
Phosphate	3.0-4.5 mg/dL	N/A	N/A	
Bilirubin	0.2-1.2 mg/dL	0.8 mg/dL	0.7 mg/dL	
Alk Phos	40-150 U/L	108 U/L	136 U/L	

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	Clear, Yellow	N/A	N/A	
pH	5.0-9.0	N/A	N/A	
Specific Gravity	1.003-1.030	N/A	N/A	
Glucose	Negative	N/A	N/A	
Protein	Negative	N/A	N/A	
Ketones	Negative	N/A	N/A	
WBC	0-5/hpf	N/A	N/A	
RBC	0-2/hpf	N/A	N/A	
Leukoesterase	Negative	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	Negative	N/A	N/A	
Blood Culture	Negative	N/A	N/A	
Sputum Culture	Negative	N/A	N/A	
Stool Culture	Negative	N/A	N/A	

Lab Correlations Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2023). *Mosby's Diagnostic and Laboratory Test Reference* (16th ed.). Elsevier.

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

This client had several diagnostic tests performed, first was a computed tomography (CT) angiography of the left lower extremity with contrast performed on 10/12/23. The results of this test showed no arterial occlusion, dissection, or aneurysms noted in the major run-off vessels of the left lower leg. There were multiple bilateral pelvic cystic lesions noted, likely ovarian in origin. A CT is a type of x-ray that can be used to diagnose tumors, cysts, inflammation, aneurysms, obstructions and more (Pagana et al., 2023). A CT angiography of the extremity is an enhanced version of a CT where intravenous use of contrast is used to help create pictures of blood vessels in the arms and legs. This helps to diagnose things such as arterial occlusions, aneurysms, soft tissue damage and more.

A cardiac creatine kinase (CK) blood test was also performed on 10/12/23. Results of this lab showed the clients' level upon admission was 4,260 U/L compared to the normal range of 29-168 U/L. A cardiac CK blood test is used to diagnose muscle disease or injury (Pagana et al., 2023). CK is released into the blood stream following muscle disease or injury.

The client then had a chest x-ray performed on 10/12/23 that revealed no acute pathology, though there was mild bilateral infrahilar opacities that might suggest atelectasis. A chest x-ray uses radiation to create pictures of the thoracic cage (Pagana et al., 2023). Chest x-rays can reveal tumors, inflammation, or fluid accumulation in the lungs, heart size, calcification, and more.

An electrocardiogram (ECG) was also performed on 10/12/23 and revealed that the client's heart has a normal sinus rhythm. An ECG is a graphical representation of the electrical activity of the heart during the cardiac cycle (Pagana et al., 2023). An ECG is typically used to identify if a person has abnormal heart rhythms.

Lastly, a vascular ultrasound study of both the arteries and veins of the left duplex, lower extremity were performed on 10/12/23. Results of the ultrasound showed evidence of decreased blood

flow in the distal anterior, tibial artery. All veins that were visualized showed normal compressibility, color, and flow with the exception of one superficial vein in the area of the left calf that showed evidence of thrombophlebitis. Vascular ultrasounds are used to detect vascular occlusion or thrombosis of arteries or veins (Pagana et al., 2023). It uses a doppler tool to detect moving red blood cells and combined with duplex scanning allows for direct visualization of narrow or occluded arteries.

Diagnostic Imaging Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2023). *Mosby's Diagnostic and Laboratory Test Reference* (16th ed.). Elsevier.

Current Medications (10 points, 2 points per completed med)

5 <u>different</u> medications must be completed

Brand/Generic	Ancef (cefazolin) (Jones & Bartlett Learning, 2023).	Wellbutrin (bupropion hydrochloride) (Jones & Bartlett Learning, 2023).	Prinivil (lisinopril) (Jones & Bartlett Learning, 2023).	Glucophage (metformin hydrochloride) (Jones & Bartlett Learning, 2023).	Lovenox (enoxaparin sodium) (Jones & Bartlett Learning, 2023).
Dose	1,000mg	200mg	10mg	500mg	40mg
Frequency	Every 8 hours	2 times a day	Daily	Daily	Every 24 hours
Route	IV push over 5 minutes.	Orally	Orally	Orally	Subcutaneous injection
Classification	Pharmacologic: First generation cephalosporin. Therapeutic: Antibiotic (Jones & Bartlett Learning, 2023).	Pharmacologic: Aminoketone Therapeutic: Antidepressant, smoking cessation adjunct (Jones & Bartlett Learning, 2023).	Pharmacologic: ACE inhibitor Therapeutic: Antihypertensive (Jones & Bartlett Learning, 2023).	Pharmacologic: Biguanide Therapeutic: Antidiabetic (Jones & Bartlett Learning, 2023).	Pharmacologic: low molecular weight heparin Therapeutic: anticoagulant (Jones & Bartlett Learning, 2023).
Mechanism of Action	Interferes with the formation of bacterial cell walls by inhibiting cross-linking of peptidoglycan (Jones & Bartlett Learning, 2023). Without these bacterial cells die.	It may inhibit neurons from up-taking dopamine, norepinephrine, and serotonin which can significantly relieve symptoms of depression (Jones & Bartlett Learning, 2023).	Helps to lower blood pressure by inhibiting the conversion of Angiotensin I to Angiotensin II, which is a strong vasoconstrictor (Jones & Bartlett Learning, 2023).	Helps the liver store excess glucose as glycogen, which reduces glucose production (Jones & Bartlett Learning, 2023). Can also increase the body's number of insulin receptors.	Increases the action of antithrombin III, a coagulation inhibitor (Jones & Bartlett Learning, 2023). It binds with and inactivates clotting factors like thrombin and this prevents the formation of clots.

Reason Client Taking	To prevent and treat skin and soft tissue infections from her recent fasciotomy (Jones & Bartlett Learning, 2023).	To treat depression (Jones & Bartlett Learning, 2023).	To treat hypertension (Jones & Bartlett Learning, 2023).	To help reduce blood glucose for type 2 diabetes (Jones & Bartlett Learning, 2023).	To prevent DVT since she is at risk for thromboembolic complications following her fasciotomy and restricted mobility (Jones & Bartlett Learning, 2023).
Contraindications (2)	1. Hypersensitivity to cefazolin, other cephalosporins or their counterparts (Jones & Bartlett Learning, 2023). 2. Added nephrotoxicity when combined with loop diuretics and aminoglycosides (Jones & Bartlett Learning, 2023).	1. If already using another form of bupropion concurrently (Jones & Bartlett Learning, 2023). 2. If a person has a seizure disorder or conditions that increase the risk of seizures (Jones & Bartlett Learning, 2023).	1. Concurrent aliskiren use in patients with diabetes (Jones & Bartlett Learning, 2023). 2. Hereditary or idiopathic angioedema (Jones & Bartlett Learning, 2023).	1. Acute or chronic metabolic acidosis or ketoacidosis (Jones & Bartlett Learning, 2023). 2. Severe renal disease (Jones & Bartlett Learning, 2023).	1. If already taking platelet aggregation inhibitors like aspirin (Jones & Bartlett Learning, 2023). 2. Active major bleeding (Jones & Bartlett Learning, 2023).
Side Effects/Adverse Reactions (2)	1. Acute generalized exanthematous pustulosis (Jones & Bartlett Learning, 2023). 2. Hypotension (Jones & Bartlett Learning, 2023).	1.Blurred vision (Jones & Bartlett Learning, 2023). 2. Constipation (Jones & Bartlett Learning, 2023).	1. Arrythmias (Jones & Bartlett Learning, 2023). 2. Pyelonephritis (Jones & Bartlett Learning, 2023).	1. Hypoglycemia (Jones & Bartlett Learning, 2023). 2. Aplastic anemia (Jones & Bartlett Learning, 2023).	1. Heparin induced thrombocytopenia (Jones & Bartlett Learning, 2023). 2. Pulmonary embolism (Jones & Bartlett Learning, 2023).

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2023). *2023 Nurse's Drug Handbook* (23rd ed.). Jones & Bartlett Learning LLC.

Assessment

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

General, Psychosocial/Cultural, and TWO focused assessments specific to the client.

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	The client was alert and oriented to person, place, time, and situation. She appears to be in acute distress due to pain as she is weepy and grimacing when speaking. She is well-groomed but looks fatigued.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score: 21** **Drains present: Y☐ N ☒** **Type:**	Skin was fair and even toned throughout. Skin was warm and dry upon palpation with an area of greater warmth on her left calf around her incision site. Quantity, distribution, and texture of hair was appropriate for the client's gender. There was only one small bruise on her right arm near her elbow present. The only wound the client has is her surgical incision on her left calf from a fasciotomy. The wound is securely covered with gauze and dressing. There was some clear drainage seeping through the dressing. The client also had a rash across the top of her back and shoulder blades. The rash was comprised of small, slightly raised bumps, that were fairly spread out and the client described the rash as "itchy and burning." Other than this, the skin was clear and had good turgor with no tenting. The client's Braden Score is 21, indicating that she is low risk for pressure injury. The client's nails on both fingers and toes were without clubbing or cyanosis and were firmly attached to the nail beds. Capillary refill time was less than 3 seconds bilaterally on fingers and toes.
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	.
CARDIOVASCULAR: **Heart sounds:**	There are no signs of jugular vein distention bilaterally. S1 and S2 sounds were clear at all locations. No signs of murmurs, gallops, or rubs and no S3 or S4 sounds present. The apical pulse was

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:**	palpable at the 5th intercostal space and left midclavicular line. According to EKG, the client's cardiac rhythm is normal sinus rhythm . Client's peripheral pulses were even and 2+ bilaterally, except for the left posterior tibial pulse which was 1+, this is likely due to edema. Capillary refill was also less than 3 seconds bilaterally in fingers and toes. +1 pitting edema was present on the left ankle and foot likely due to her fasciotomy, but no edema elsewhere. Overall, the extremities were warm, dry, and symmetrical.
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: 74, High** **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):**	The client states to live with her mom and feels supported and safe both at home and at work where she is a CNA. She has a history of anxiety and depression but is on medication to help control both of these conditions. It appears that the client's pain is not being well-managed and she appears to be struggling to cope with the extreme pain stating that she is "worried to go home with this much pain". Her developmental level is appropriate for a woman her age. There was no religion on file for this client and she did not bring it up as being important to her.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
11:13	89 bmp	124/75 mmHg	14 bmp	96.7°F (Temporal)	95%

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
08:50	Numeric Rating Pain Scale	Left Calf	10	"Throbbing" "Sharp"	Elevated the calf with pillows and gave 325mg of hydrocodone-acetaminophen

Re-evaluated pain at 09:30 and client still rated pain 9/10; the nurse spoke with the provider about increasing pain medication dosage.

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
720mL water 480mL coffee 100% of a banana and blueberry muffin	Can ambulate to bathroom with a 1 person assist. Urine x2 (Dark yellow, clear) No BM during shift
Total Fluid Intake: 1200mL	**Total Fluid Output: Non-measurable**

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 due to biological injury agent related to medical diagnosis of compartment syndrome as evidenced by the client rating her pain a 10/10, weeping,	This diagnosis was chosen because the client was in obvious, severe pain. Despite having had a fasciotomy to treat compartment syndrome and the use of 325mg of hydrocodone-acetaminophen,	**1.** Monitor and record effectiveness of pain medication and speak with provider to possibly modify the dosage if the client's pain is not controlled (Phelps, 2023). **2.**Provide comfort measures to the	**1.** Client will state satisfaction with pain manageme nt regime and identify measures effective in relieving pain (Phelps, 2023).	Upon re-evaluation and modification of pain medication regime the client was compliant with changes and now rates her pain a 3/10. The client stated satisfaction with the new pain management regime and was able to verbalize

grimacing, and protective guarding (Phelps, 2023).	her pain was still uncontrolled and non-tolerable. This is a priority because acute pain can cause increases in heart rate, respirations, and blood pressure and it also inhibits the client from easily performing activities of daily living and healing effectively.	client to promote relaxation such as ambient lighting, bathing, distractions, and breathing techniques (Phelps, 2023).		that listening to music and a warm bath helped to relieve her pain as well. The client also stated that with her pain better controlled she is much more comfortable going home and will continue to use relaxation measures to manage any pain.
2. Impaired walking related to pain as evidenced by hesitancy to ambulate, unsteady gait, grabbing on to furniture for balance, and a high fall score of 74 (Phelps, 2023).	This diagnosis was chosen because the client verbalized that she was hesitant to get up and use the bathroom because it hurt to walk. Upon watching her walk to the bathroom, she required some assistance and would use furniture to get to the bathroom because she did not want to place any weight on her left leg. Her impaired walking is a nursing priority because it could lead to a fall and	**1.** Follow the prescribed medical regimen to manage or prevent complications (e.g., administering pain medication routinely, keeping the call light within reach, and providing a one person assist) and to promote the client's health and well-being (Phelps, 2023). **2.** Instruct client in ambulation techniques and measures (e.g., pushing of the bed using arms	**1.** Client will maintain safety during ambulation and will achieve highest level of ambulation possible prior to discharge (Phelps, 2023).	The client was compliant with the prescribed medical regime and was good about always using the call light to get assistance ambulating. The client demonstrated and verbalized an understanding of safe ambulation techniques such as non-skid socks and keeping the room free of clutter. Once the client's pain was controlled, she demonstrated pain-free ambulation and returned to her highest level of

	further injury.	and keeping a clutter free space) to prevent complications and prepare for discharge (Phelps, 2023).		ambulation, walking well without an assist.

Other References (APA):

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

Concept Map (23 Points):

Subjective Data

- Pain rated 10/10
- Client stated that leg pain like this has never happened before.
- Pain described as "throbbing and burning."
- Walking made the pain worse, elevation after surgery makes it better.

Objective Data

- Client A/O x 4, but in acute distress as evidenced by grimacing in pain and weeping.
- Vitals:
  - Temp: 96.7°F
  - Pulse: 89
  - Respirs: 14
  - BP: 124/75
  - O2Sat: 95%
  - Pain: 10/10
- Labs:
  - CBC showed elevated WBC count and decreased Hgb and Hct, everything else was WNL.
  - Blood chemistry showed low Na+, Mg, and CO2 and high BUN, calcium, and glucose, everything else was WNL.
- Diagnostics:
  - Highly elevated cardiac CPK of 4,260 U/L
  - Ultrasound showed evidence of decreased blood flow in distal anterior tibial artery and evidence of thrombophlebitis in a vein of the left calf.
- Assessments:
  - Fall Score 74
  - Surgical incision on left calf with clear drainage through dressing
  - +1 pitting edema on left ankle

Client Information

- 41-year-old Caucasian woman.
- Presented to ER with extreme left leg pain diagnosed as nontraumatic compartment syndrome.
- Received an open left leg fasciotomy.
- History of elevated blood pressure.
- Type II diabetes.
- No previous history of leg pains.

Nursing Diagnosis/Outcomes

- Acute pain due to biological injury agent related to medical diagnosis of compartment syndrome as evidenced by the client rating her pain a 10/10, weeping, grimacing, and protective guarding (Phelps, 2023).
  - Client will state satisfaction with pain management regime and identify measures effective in relieving pain (Phelps, 2023).
- Impaired walking related to pain as evidenced by hesitancy to ambulate, unsteady gait, grabbing on to furniture for balance, and a high fall score of 74 (Phelps, 2023).
  - Client will maintain safety during ambulation and will achieve highest level of ambulation possible prior to discharge (Phelps, 2023).

Nursing Interventions

- Monitor and record effectiveness of pain medication and speak with provider to possibly modify the dosage if the client's pain is not controlled (Phelps, 2023).
- Provide comfort measures to the client to promote relaxation such as ambient lighting, bathing, distractions, and breathing techniques (Phelps, 2023).
- Follow the prescribed medical regimen to manage or prevent complications (e.g., administering pain medication routinely, keeping the call light within reach, and providing a one person assist) and to promote the client's health and well-being (Phelps, 2023).
- Instruct client in ambulation techniques and measures