

N311 Care Plan 5

Cheyenne Walls

Lakeview College of Nursing

N311: Foundations of Professional Practice

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4/10/24

Demographics (5 points)

Date of Admission 4/2/24	Client Initials AS	Age 50	Gender Male
Race/Ethnicity White	Occupation N/A	Marital Status Divorced	Allergies No Known Allergies
Code Status Full	Height 5'10"	Weight 362 lbs (164.2 Kg)	

Medical History (5 Points)

Past Medical History: Arthritis, Asthma, CHF, COPD, Episodic cluster headache, hyperlipidemia, Hypertension, Blood Clots, Myocardial Infarction, Neuropathy

Past Surgical History: Tonsillectomy, Back Surgery, Lithotripsy, Cholecystectomy, Laparoscopic, Total Knee Replacement, Total Hip Replacement

Family History: Mother- Dementia, Diabetes; Father- Diabetes, Hypertension, Lung Cancer; Paternal Grandmother- Kidney Disease

**Social History (tobacco/alcohol/drugs including frequency, quantity, and duration of use):
Never smoked or used smokeless tobacco, not currently using alcohol, never used drugs.**

Admission Assessment

Chief Complaint (2 points): Left Knee Pain

History of Present Illness – OLD CARTS (10 points): This patient had the onset of knee pain approximately a year and a half ago. The location is the left knee. The pain is consistent. The characteristic of the pain is smashing or pinching feeling. This area also has discharge. A factor that aggravates this pain is simply moving the left leg or knee. The only relief this patient gets is resting or lying down. He did have treatment for the knee pain and had a complete knee replacement. The severity of this pain while moving it is 10+ but when at rest it is about an 8/10.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Abscess of Knee

Secondary Diagnosis (if applicable): N/A

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

The knee joint has this special liquid called synovial fluid that's like a filtered version of blood without the red cells (Gerena & DeCastro, 2020). It's got stuff like hyaluronic acid and proteins that keep the joint moving smoothly and without friction. When the joint lining gets inflamed, it can get swollen because the barrier gets leaky and lets big molecules slip through. Plus, synovial fluid has proteins just like the ones in blood and it's even got some antibacterial action to keep the joint clean.

If there is injury to your knee it could show up first as swelling, and there are tons of possible reasons for it. This swelling, called knee effusion, might come from something that happens suddenly or over time, and it could be because of an injury or without any injury at all. When you go to a regular doctor, the usual suspects are usually arthritis, an injury, or gout.

The knee works like a hinge and can get hurt from stuff like damage, swelling, infections, or wear-and-tear. Swelling in the knee can happen because of both sudden injuries and long-term problems. It could be anything from a direct hit to an ongoing illness. To figure out what's causing the swelling, it's super important to know how the knee works and what goes wrong. To nail the right diagnosis, doctors need to really dive into your medical history and give you a detailed physical check-up.

The signs and symptoms of abscess fluid on the knee come down to simply, swelling, stiffness, and pain. (Mayo Clinic, 2019) The diagnostic tests to show the fluid on the knee could possibly be an X-ray, Ultrasound, and MRI. There are two main treatments for this and those consist of therapy and surgery. They will also have a subsequent synovial fluid analyze to identify this diagnosis. (Gerena et al. 2024)

Pathophysiology References (2) (APA):

Gerena, L. A., & DeCastro, A. (2020). *Knee Effusion*. PubMed; StatPearls Publishing.

<https://www.ncbi.nlm.nih.gov/books/NBK532279/>

Swollen knee - Symptoms and causes. (2019). Mayo Clinic.

<https://www.mayoclinic.org/diseases-conditions/swollen-knee/symptoms-causes/syc-20378129>

Swollen knee - Diagnosis and treatment - Mayo Clinic. (n.d.). Wwww.mayoclinic.org.

<https://www.mayoclinic.org/diseases-conditions/swollen-knee/diagnosis-treatment/drc-20378134>

Gerena, L. A., Mabrouk, A., & DeCastro, A. (2024). *Knee Effusion*. PubMed; StatPearls

Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK532279/#:~:text=Arthrocentesis%20and%20subsequent%20synovial%20fluid>

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		4.89	4.41	N/A
Hgb		13.6	12.4	This abnormal lab value could be due to the patients previous Chronic Obstructive Pulmonary Disease or Neuropathy. (Pagama, p.489, 2019)
Hct		41.6	38	N/A
Platelets		272	261	N/A
WBC		11.6	9.20	N/A
Neutrophils		71.5	64	N/A
Lymphocytes		21.2	26.5	N/A
Monocytes		5.9	6.5	N/A
Eosinophils		0.7	2.5	N/A
Bands		N/A	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-		142	141	N/A
K+		3.7	4.2	N/A
Cl-		105	111	This elevated chloride for my patient could be due to his

				previous diagnosis of asthma. (Pagama, p.234, 2019)
CO2		23	21	This could be due to previous respiratory illnesses but all these lab values do have a correlation to some type of renal problem so this patient could have an underlying renal dysfunction. (Pagama, p.198, 2019)
Glucose		126	89	N/A
BUN		14	15	N/A
Creatinine		1.25	1.09	N/A
Albumin		4.4	N/A	N/A
Calcium		10.2	9.0	N/A
Mag		N/A	N/A	N/A
Phosphate		N/A	N/A	N/A
Bilirubin		N/A	N/A	N/A
Alk Phos		72	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		N/A	N/A	N/A
pH		N/A	N/A	N/A
Specific Gravity		N/A	N/A	N/A
Glucose		N/A	N/A	N/A
Protein		N/A	N/A	N/A

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

Lab Correlations Reference (1) (APA):

Kathleen Deska Pagana, Timothy James Pagana, & Theresa Noel Pagana. (2019). *Mosby's diagnostic and laboratory test reference* (14th ed.). Elsevier.

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

The only diagnostic test that was performed was an Axial CT scan. The results of this scan of the organ and tissues showed that there was soft tissue enlargement. This scan also showed the patient diagnosis of abscess fluid because it showed an underlying fluid on the left knee. This is where the previous knee replacement was a year and half ago.

Diagnostic Imaging Reference (1) (APA):

<https://www.cancer.gov/publications/dictionaries/cancer-terms/def/computerized-axial-tomography-scan>. (2011, February 2). Wwww.cancer.gov.

<https://www.cancer.gov/publications/dictionaries/cancer-terms/def/computerized-axial-tomography-scan>

Brand/Generic	Furosemide Lasix	Enoxaparin Louenox	Tenormin Atenolol	Piperacillin/ tazobactam Zosyn
Dose	20 mg	40 mg	50 mg	4.5g
Frequency	Daily	Every 12 Hours	Daily	Every 8 Hours
Route	Oral	Subcutaneous	Oral	IV
Classification	Loop Diuretic (Mayo Clinic, 2019)	Low molecule weight heparin (Drugbank, 2023)	Cardio selective beta-blocker (Drugbank, 2023)	Beta-lactam antibiotic (Drugbank, 2023)
Mechanism of Action	By preventing sodium and chloride from being reabsorption in the proximal and distal tubules as well as the thick ascending loop of Henle, furosemide encourages diuresis. (Drugbank, 2023)	When enoxaparin binds to antithrombin III, a complex is formed that permanently deactivates a factor that is commonly employed in clinical settings to monitor anticoagulation. Following its release, enoxaparin binds to more anti- thrombin molecules. Enoxaparin	“Selectively binds to the β1-adrenergic receptor as an antagonist up to a reported 26 fold more than β2 receptors.¹⁵ Selective activity at the β1 receptor produces cardioselectivity due to the higher population of this receptor in cardiac tissue.” (Drugbank, 2023)	Piperacillin inhibits the third and final stage of bacterial cell wall formation by attaching to certain penicillin-binding proteins found inside the bacterial cell wall. Then, bacterial cell wall autolytic enzymes induce cell lysis. (Drugbank, 2023)

		directly inhibits thrombin. Thrombin prevents thromboembolic events by not being able to change fibrinogen into fibrin and form a clot. (Drugbank, 2023)		
Reason Client Taking	Buildup of Fluid	Prevention of DVT	Blood Pressure	Abscess
Contraindications (2)	<ol style="list-style-type: none"> 1. Hypokalemia 2. Dizziness (Mayo Clinic, 2019)	<ol style="list-style-type: none"> 1. Risk for bleeding 2. Kidney problems (Mayo Clinic, 2019)	<ol style="list-style-type: none"> 1. Heart Failure 2. Changes in blood sugar (Mayo Clinic, 2019)	<ol style="list-style-type: none"> 1. Serious skin reactions 2. Joint/muscle pain (Mayo Clinic, 2019)
Side Effects/Adverse Reactions (2)	<ol style="list-style-type: none"> 1. General feeling of tired or weakness 2. Low back pain (Mayo Clinic, 2019)	<ol style="list-style-type: none"> 1. Headaches 2. Dizziness (Mayo Clinic, 2019)	<ol style="list-style-type: none"> 1. Chest tightness 2. Blurred vision (Mayo Clinic, 2019)	<ol style="list-style-type: none"> 1. Diarrhea 2. Bladder pain (Mayo Clinic, 2019)

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

Medications (5 required)

Medications Reference (1) (APA):

MAYO Clinic. (2019). *Drugs and Supplements - Drugs and Supplements - Mayo Clinic*.

Mayoclinic.org. <https://www.mayoclinic.org/drugs-supplements>

Drugbank. (2023). *Drugs - DrugBank*. Go.drugbank.com. <https://go.drugbank.com/drugs>

Assessment

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

<p>GENERAL: Alertness: x4 Orientation: x4 Distress: when moving knee Overall appearance: Slight odor</p>	<p>This patient was alert and oriented to person, place, time, and situation. They did seem in distress for the pain they were having which is expected to see with that high of a severity with the pain. This patient did seem a little “unclean” and did have an odor for his overall appearance.</p>
<p>INTEGUMENTARY: Skin color: Olive Character: Very Dry Temperature: Normal/ Warm Turgor: Normal Rashes: None Bruises: None Wounds: Incision Braden Score: 20 Drains present: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p>	<p>This patient had this skin tone of olive. The patient skin especially on lower extremities were very dry and almost flaky. The temperature with normal and warm. This skin turgor was good and recoils in appropriate amount of time. There were no rashes or bruised but did have one wound where the previous incision was. This patient did have a Braden scale of 20 classifying him as not a patient that we would have to turn avoiding skin breakdown. This patient had no drains present.</p>
<p>HEENT: Head/Neck: Symmetrical Ears: Symmetrical Eyes: Symmetrical Nose: Symmetrical Teeth: Intact</p>	<p>This patient had his head and neck symmetrical along with his ears, eyes, and nose symmetrical to normal findings. Along with the eyes PERRLA was intact and Pupils were a 4.</p>
<p>CARDIOVASCULAR: Heart sounds: Normal S1, S2, S3, S4, murmur etc. S1 S2 Cardiac rhythm (if applicable): Slight Gallop Peripheral Pulses: +2 Capillary refill: Normal Neck Vein Distention: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Edema Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Location of Edema: Ankles and Feet</p>	<p>This patient had normal heart sounds. S1 and S2 were heard with no other abnormalities heard. The cardiac rhythm did seem to have a slight gallop. Peripheral pulses were normal with a +2. Capillary refill was normal for upper and normal extremities with less than 2 seconds. There was no neck vein distention. There was edema on this patient in their ankles and feet.</p>

RESPIRATORY: Accessory muscle use: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Breath Sounds: Location, character Clear, Normal	This patient had no respiratory assessor muscles or retractions. The breath sounds were clear bilateral.
GASTROINTESTINAL: Diet at home: No Diet Current Diet Cardiac Height: 5'10" Weight: 362 Auscultation Bowel sounds: Normal gurgles Last BM: Day before admission Palpation: Pain, Mass etc.: Slight pain by umbilical Inspection: Rounded Distention: N/A Incisions: Drainage Scars: N/A Drains: N/A Wounds: N/A Ostomy: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Nasogastric: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Size: Feeding tubes/PEG tube Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:	This patient did not follow any diet at home just ate whatever you felt like eating. At the hospital this patient was on a cardiac diet. His current height 5'10' and weight 363 lbs. There were normal gurgles (borborygmus) through all four quadrants. Last BM was the day prior to admission. With light and deep palpations there was slight pain by the umbilical region due to previous repaired hernia. Also, with palpation the abdomen was very firm and hard to palpate. Upon inspection the abdomen was rounded. There was no distention. There was an incision from previous knee replacement that had drainage of serosanguineous fluid. No scars, drains, wounds, ostomy, nasogastric tube, or feeding tube present in this patient.
GENITOURINARY: Color: yellow Character: no odor Quantity of urine: N/A Pain with urination: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Dialysis: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Inspection of genitals: N/A Catheter: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type: Size:	Upon asking the patient about previous urine content he explained that it was a normal yellow with no odor. No quantity was received from this patient. There was no pain with urinating. This patient was not on dialysis. Per clinical instructor, I was to not inspect genitals. This patient did not have a catheter placed.
MUSCULOSKELETAL: Neurovascular status: ROM: Supportive devices: Strength: ADL Assistance: Y <input type="checkbox"/> N <input type="checkbox"/> Fall Risk: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Fall Score: 50 Activity/Mobility Status: Independent (up ad lib) <input type="checkbox"/>	Per Instructor this was not needed for completion.

Needs assistance with equipment <input type="checkbox"/> Needs support to stand and walk <input type="checkbox"/>	
NEUROLOGICAL: MAEW: Y <input type="checkbox"/> N <input type="checkbox"/> PERLA: Y <input type="checkbox"/> N <input type="checkbox"/> Strength Equal: Y <input type="checkbox"/> N <input type="checkbox"/> if no - Legs <input type="checkbox"/> Arms <input type="checkbox"/> Both <input type="checkbox"/> Orientation: Mental Status: Speech: Sensory: LOC:	Per Instructor this was not needed for completion.
PSYCHOSOCIAL/CULTURAL: Coping method(s): Sit in silence Developmental level: appropriate for age Religion & what it means to pt.: Non-Denominational Christian Personal/Family Data (Think about home environment, family structure, and available family support): Homeless, (Ex) Wife	This patient expressed that when he is having a bad day or is stressed, he likes to just sit in silence and think. He was up to his developmental level for his age. He stated that he was a non-denominational Christian, no farther information was given about that, patient states "typical Christian". Patient did state that he was homeless because of his ex-wife but still had he at "home".

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1106	66 bpm	127/70 mmHg	16 breaths/min	96.1 F	93% on room air

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0932	Numeric	Left Knee	10/10	Smashing, Pinching	Elevate, cushion lower extremities

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
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1,620 mL of coffee and water	700 mL (urine)
100% of food	

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

Nursing Diagnosis	Rationale	Interventions (2 per dx)	Outcome Goal (1 per dx)	Evaluation
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Explain why the nursing diagnosis was chosen 			<ul style="list-style-type: none"> • How did the client/family respond to the nurse’s actions? <ul style="list-style-type: none"> • Client response, status of goals and outcomes, modifications to plan.
<p>1. Risk for infection as evidence by weight, previous health history, and presence of drainage from incision. (Phelps, 2020, p.332-333)</p>	<p>I choose this because this patient is at a high risk for infection due to many things but one most importantly the incision from a year and half ago having a bubble look and unknown drainage.</p>	<p>1. “Washing hands before and after providing care.” (Phelps, 2020, p.333)</p> <p>2. “Monitor WBC ordered, as ordered. Report elevations or depressions.”</p> <p>(Phelps, 2020, p.334)</p>	<p>1. The patient will not acquire an infection on his stay at the hospital.</p>	<p>This patient responded well to this and understood the importance of keeping clean and was confident in the end goal.</p>
<p>2. This patient</p>	<p>I choose this</p>	<p>1. Provide this</p>	<p>1. This</p>	<p>This is goal is</p>

<p>can be at risk for impaired mobility related to activity intolerance, BMI, pain as evidence by the patient's previous knee replacement along with fluid excess of the knee, the patient's body weight. (Phelps, 2020, p.376-377)</p>	<p>because my patient having knee pain along with the incision sight and having a higher body mass index, he is at a much greater risk for mobility problems.</p>	<p>patient with dietary information along with a referral for a dietitian.</p> <p>2."Refer patient to a physical therapist for development of mobility regimen to help rehabilitate musculoskeletal deficits." (Phelps, 2020, p.378)</p>	<p>patient will be able to perform AROM after a week of PT with limited pain.</p>	<p>harder for my patient because of this knee pain from previous replacement but is pain is manageable, it is more this applicable for him. He responded well after pain meds and wanting a new surgery to than work with PT.</p>
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Other References (APA):

Linda Lee Phelps. (2020). *Sparks & Taylor's Nursing Diagnosis Reference Manual*. (11th ed.). Wolters Kluwer Medical.

Concept Map (23 Points):

Subjective Data

- Knee pain
- “Was kicked”
- Previous knee replacement
- Discharge from knee

Nursing Diagnosis/Outcomes

1. Risk for infection as evidence by weight, previous health history, and presence of drainage from incision. (Phelps, 2020, p.332-333)
2. This patient can be at risk for impaired mobility related to activity intolerance, BMI, pain as evidence by the patient’s previous knee replacement along with fluid excess of the knee, the patient’s body weight. (Phelps, 2020, p.376-377)

Objective Data

- Discharge from knee
- Temperature 96.1 F
- Elevated Cl-
- Elevated CO2
- Decrease Hgb

Client Information

50-year-old male patient with history of arthritis, asthma, CHF, COPD, Cluster headaches, hyperlipidemia, hypertension, blood clots, myocardial infarction, neuropathy, sleep apnea, 2 strokes and diabetes. This admission was due to abscess fluid on the left knee that had a previous knee replacement a year and half ago. Majority of labs are normal, slight elevation in the Cl but a decrease in Hgb and CO2.

Nursing Interventions

1. “Washing hands before and after providing care.” (Phelps, 2020, p.333)
 2. “Monitor WBC ordered, as ordered. Report elevations or depressions.” (Phelps, 2020, p.334)
1. **Provide this patient with dietary information along with a referral for a dietitian.**
 2. **Refer patient to a physical therapist for development of mobility regimen to help rehabilitate musculoskeletal deficits.”** (Phelps, 2020, p.378)

