

N311 Care Plan #4

Lakeview College of Nursing

Camryn Studer

Demographics (5 points)

Date of Admission 9/16/21	Patient Initials D.F.	Age 104	Gender F
Race/Ethnicity Caucasian	Occupation Retired	Marital Status N/A	Allergies N/A
Code Status DNR	Height 48.9 in	Weight 101.8 lbs	

Medical History (5 Points)

- Past Medical History:**
- Chronic heart failure with grade 1 left ventricular systolic dysfunction
 - Essential hypertension
 - High cholesterol
 - Parkinson's disease
 - Dementia
 - Glaucoma
 - Presbycusis
 - Age related hearing loss
 - Osteoarthritis
 - Dysphagia
- Past Surgical History:**
- Open reduction and internal fixation (ORIF) of left hip fracture
 - Appendectomy
- Family History:** -N/A
- Social History (tobacco/alcohol/drugs):** -N/A

Admission Assessment

Chief Complaint (2 points): Right hip pain and neck pain after fall

History of present Illness (10 points): One hundred and three year old female patient endured a mechanical fall on 9/26/2021. She presented to the emergency room with right hip pain and neck pain. Her pain was rated an 8 on a scale from 1 to 10. The patient stated that the pain is dull in nature and does not radiate. She claims that there are no alleviating factors and is aggravated by movement. Patient is now at Odd Fellows for rehabilitation.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Displaced intertrochanteric fracture of right femur

Secondary Diagnosis (if applicable): N/A

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

When the fractured bone and surrounding tissues bleed, generating a fracture hematoma, the natural healing process begins. A blood clot forms between the fragmented shards when the blood coagulates. Blood arteries form into the jelly-like matrix of the blood clot within a few days. The new blood arteries bring phagocytes to the region, allowing the non-viable material to be gradually removed. In addition, blood veins transport fibroblasts into the vessel walls, which multiply and generate collagen fibers. The blood clot is replaced by a collagen matrix in this way. Collagen's rubbery consistency allows bone fragments to move only a small amount unless severe or persistent force is applied. (Meena et al., 2019).

Some fibroblasts start laying down bone matrix in the form of collagen monomers at this point. These monomers combine spontaneously to produce the bone matrix, within which bone

crystals (calcium hydroxyapatite) are formed as insoluble crystals. Healing bones typically takes about six weeks depending on the severity of the fracture (Meena et al., 2019). My patient had abnormal neutrophil, lymphocyte, and monocyte lab values which is most likely related to the fracture.

Signs and symptoms of a displaced intertrochanteric fracture includes:

- Inability to get up from a fall or to walk
- Severe pain in your hip or groin
- Inability to put weight on your leg on the side of your injured hip
- Bruising and swelling in and around your hip area
- Shorter leg on the side of your injured hip
- Outward turning of your leg on the side of your injured hip (*Hip fracture*, 2020).

“Intertrochanteric fractures are treated surgically with either a sliding compression hip screw and side plate or an intramedullary nail” (Fischer & Gray, 2020). Bone screws secure the compression hip screw to the exterior side of the bone. A large secondary screw (lag screw) is inserted into the femoral head and neck via the plate. The impaction and compression at the fracture site are made possible by this design. This will improve stability and aid in the healing process (Fischer & Gray, 2020). Since my patient had a displaced intertrochanteric fracture, she had an open reduction and internal fixation (ORIF) of the left hip.

An anteroposterior view of the pelvis and a cross-table lateral view of the hip are suitable. The frog-leg view should be avoided; placing the limb for this view causes considerable discomfort and can cause nondisplaced fractures to shift or a displaced fracture to deteriorate. If x-rays are negative but a hip fracture is suspected, magnetic resonance

imaging or a bone scan should be done. Other causes, such as pelvic, stress, or pathologic fractures, should be ruled out by the imaging study. Although computed tomography (CT) can detect trabecular bone injuries in osteoporotic fractures and indicate bone marrow edema around the fracture, it may not detect trabecular bone injuries in osteoporotic fractures (LeBlanc et al., 2019). My patient received a x-ray on 9/6/2021 which confirmed her right intertrochanteric fracture of the femur.

“The postoperative protocol consists of weight-bearing as tolerated, chemical VTE prophylaxis for up to 6 weeks, and progressive physical therapy beginning in the immediate postoperative period” (Attum, 2021). My patient is wheelchair bound but does ambulate with one assist in some cases. She does not report any pain when moving anymore and the fracture is very close to being completely healed.

References:

- Attum, B. (2021, August 11). *Intertrochanteric femur fracture*. StatPearls [Internet]. Retrieved November 8, 2021, from <https://www.ncbi.nlm.nih.gov/books/NBK493161/>.
- Fischer, S. J., & Gray, J. L. (2020, November). *Hip fractures - orthoinfo - aaos*. OrthoInfo. Retrieved November 8, 2021, from <https://orthoinfo.aaos.org/en/diseases--conditions/hip-fractures>.
- LeBlanc, K. E., Herbert L. Muncie, J., & LeBlanc, L. L. (2019, June 15). *Hip fracture: Diagnosis, treatment, and secondary prevention*. American Family Physician. Retrieved November 8, 2021, from <https://www.aafp.org/afp/2014/0615/p945.html>.
- Meena, S., Sharma, P., Sambharia, A. K., & Dawar, A. (2019). *Fractures of distal radius: An Overview*. Journal of family medicine and primary care. Retrieved November 1, 2021, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4311337/>.

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	4.0-5.8x10 ⁶ /mcL	4.24	N/A	N/A
Hgb	12.0-15.8g/dL	13.1	N/A	N/A
Hct	36.0-47.0%	42.3	N/A	N/A
Platelets	140-440K/mcL	189	N/A	N/A
WBC	4.0-12.0K/mcL	11.4	N/A	N/A
Neutrophils	40-60%	9.60	N/A	Increased white blood cell counts after stress, surgery, or injury is very common. White blood cells increase to help aid in the healing process (Paladino et al., 2016).
Lymphocytes	19-49%	0.99	N/A	Increased white blood cell counts after stress, surgery, or injury is very common. White blood cells increase to help aid in the healing process (Paladino et al., 2016).
Monocytes	3.0-13.0%	0.67	N/A	Increased white blood cell counts after stress, surgery, or injury is very common. White blood cells increase to help aid in the healing process (Paladino et al., 2016).
Eosinophils	0.0-8.0%	0.03	N/A	N/A
Bands	0.0-10.0%	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
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Na-	134-144mmol/L	140	N/A	N/A
K+	3.5-5.1mmol/L	4.6	N/A	N/A
Cl-	98-107mmol/L	107	N/A	N/A
CO2	21-31mmol/L	29	N/A	N/A
Glucose	70-99mg/dL	111	N/A	“Acute fractures induce stress hormone secretion of glucocorticoid, glucagon, adrenaline, thyroxin, somatotropin, and others, which is called the “stress response.” During the stress response, activation of serial hormones induces insulin resistance, resulting in hyperglycemia and the associated risk factors present then in patients with acute trauma” (Chen et al., 2017).
BUN	7-25 mg/dL	20	N/A	N/A
Creatinine	0.50-1.20mg/dL	1.11	N/A	N/A
Albumin	3.5-5.7 g/dL	3.6	N/A	N/A
Calcium	8.6-10.3 mg/dL	9.2	N/A	N/A
Mag	1.6-2.6 mg/dL	N/A	N/A	N/A
Phosphate	2.4-4.5 units/L	N/A	N/A	N/A
Bilirubin	0.3-1.0 mg/dL	1.2	N/A	Surgery and use of local anesthesia cause a lot of stress on the body. It has been shown that liver enzymes and bilirubin levels increase postoperatively (Mostafa Gomaa et al., 2018).
Alk Phos	34-104 units/L	91	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	yellow, clear	N/A	N/A	N/A
pH	5.0-9.0	N/A	N/A	N/A
Specific Gravity	1.003-1.013	N/A	N/A	N/A
Glucose	Negative	N/A	N/A	N/A
Protein	Negative	N/A	N/A	N/A
Ketones	Negative	N/A	N/A	N/A
WBC	0.0-0.5	N/A	N/A	N/A
RBC	0.0-3.0	N/A	N/A	N/A
Leukoesterase	Negative	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	Negative	N/A	N/A	N/A
Blood Culture	Negative	N/A	N/A	N/A
Sputum Culture	Negative	N/A	N/A	N/A
Stool Culture	Negative	N/A	N/A	N/A

Lab Correlations Reference (APA):

Chen, Y., Yang, X., Meng, K., Zeng, Z., Ma, B., Liu, X., Qi, B., Cui, S., Cao, P., & Yang, Y. (2017, October 1). *Stress-induced hyperglycemia after hip fracture and the increased risk of acute myocardial infarction in nondiabetic patients*. *Diabetes Care*. Retrieved November 8, 2021, from <https://care.diabetesjournals.org/content/36/10/3328>.

Labs to know for Nclex Review. Registered Nurse RN. (2019, July 17). Retrieved October 11, 2021, from <https://www.registerednursern.com/labs-to-know-fornclex-review/>.

Mostafa Gomaa, H., Abdelaleem Ali, N., El ela Ismaiel, S. A., & Mohamed, A. A. (2018). *Comparative study of the change in liver enzymes after general or spinal anesthetic techniques in patients with preoperatively elevated liver enzymes. - full text view*. Full Text View - ClinicalTrials.gov. Retrieved November 8, 2021, from <https://clinicaltrials.gov/ct2/show/NCT03421990>.

Paladino, L., Subramanian, R. A., Bonilla, E., & Sinert, R. H. (2016, December). *Leukocytosis as prognostic indicator of Major Injury*. *The western journal of emergency medicine*. Retrieved November 8, 2021, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3027437/>.

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

- Magnetic resonance imaging (MRI) of C-spine 9/6/2021
 - MRI was negative for anything acute
- X-ray 9/6/2021
 - Confirmed right intertrochanteric fracture of femur

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

5 different medications must be completed

Medications (5 required)

Brand/Generic	B: Tylenol G: Acetaminophen	B: Bisacodyl G: Dulcolax	B: Robitussin G: Guaifenesin	N/A	N/A
Dose	325 mg	10 mg	5 mL	N/A	N/A
Frequency	PRN	Every 12 hours PRN	Every 6 hours PRN	N/A	N/A
Route	Oral	Rectal	Oral	N/A	N/A
Classification	Antipyretics nonopioid analgesics	Stimulant laxative	Allergy, cold, and cough remedies expectorant	N/A	N/A
Mechanism of Action	-Inhibits synthesis of prostaglandins that may serve as mediators of pain and fever, primarily in the CNS. -Has no significant anti-inflammatory properties or GI toxicity.	-Stimulates peristalsis. -Alters fluid and electrolyte transport, producing fluid accumulation in the colon.	-Reduces viscosity of tenacious secretions by increasing respiratory tract fluid.	N/A	N/A
Reason Client Taking	Generalized pain	Constipation	Persistent cough	N/A	N/A
Contraindications (2)	-Previous hypersensitivity -Products containing alcohol	-Hypersensitivity -Abdominal pain	-Hypersensitivity -Products contain alcohol; avoid if known intolerance	N/A	N/A
Side Effects/Adverse Reactions (2)	-Anxiety -Hepatotoxicity	-Nausea -Hypokalemia	-Dizziness -Rash	N/A	N/A

Medications Reference (APA):

Vallerand, A. H., & Sanoski, C. A. (2021). Davis's drug guide for Nurses. F.A. Davis Company

Assessment

Physical Exam (18 points)

GENERAL: Alertness: Orientation: Distress: Overall appearance:	-Alert -A & O x2 -No signs of distress -Well groomed
INTEGUMENTARY: Skin color: Character: Temperature: Turgor: Rashes: Bruises: Wounds: Braden Score: Drains present: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:	-Appropriate for ethnicity -Dry and thin -Warm -Loose -N/A -Generalized bruising -N/A 13
HEENT: Head/Neck: Ears: Eyes: Nose: Teeth:	-Normocephalic, neck is supple, no lymph nodes palpable -Symmetrical, no cerumen, no ear pain -Crusty/watering, PEERLA, extra ocular movements intact -Nares are patent, no deviated septum, no signs of epistaxis -Dentures, gums are pink and intact
CARDIOVASCULAR: Heart sounds: S1, S2, S3, S4, murmur etc. Cardiac rhythm (if applicable): Peripheral Pulses:	 -S1 and S2 -Normal sinus rhythm -3+

<p>Capillary refill: Neck Vein Distention: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Edema Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Location of Edema:</p>	<p>-Less than 3</p>
<p>RESPIRATORY: Accessory muscle use: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Breath Sounds: Location, character</p>	<p>-Anterior, posterior clear and equal bilaterally</p>
<p>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 <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:</p>	<p>. -Regular -Regular puree with nectar thick liquids -48.9 in -101.8 lbs -All 4 quadrants active -Yesterday 11/1/21 -Abdomen soft, not tender, no masses noted -N/A -N/A -N/A -N/A -N/A -N/A -N/A</p>
<p>GENITOURINARY: Color: Character: Quantity of urine: 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: Catheter: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type: Size:</p>	<p>-N/A -N/A -N/A -N/A</p>
<p>MUSCULOSKELETAL: Neurovascular status: ROM: Supportive devices: Strength: ADL Assistance: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Fall Risk: Y <input checked="" type="checkbox"/> N <input type="checkbox"/></p>	<p>. -Intact -Active, passive intact -Wheelchair -Equal 3+</p>

Fall Score: Activity/Mobility Status: Independent (up ad lib) <input type="checkbox"/> Needs assistance with equipment <input checked="" type="checkbox"/> Needs support to stand and walk <input checked="" type="checkbox"/>	-75 -2 assist
NEUROLOGICAL: MAEW: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> PERLA: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Strength Equal: Y <input checked="" 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:	. -Oriented x2 -Appropriate for age -Clear -Hearing aids -N/A
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):	. -Watch tv and making candy -High school -Baptist -Goes to church with grandson

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
09:35	64 bpm (radial)	126/66 mmHG (right arm)	18	98.1 °F (Temporal)	93% (Room air)

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
N/A	N/A	N/A	N/A	N/A	N/A

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
N/A	N/A

Nursing Diagnosis (15 points)

Must be NANDA approved nursing diagnosis

Nursing Diagnosis	Rational	Intervention (2 per dx)	Evaluation
<ul style="list-style-type: none"> Include full nursing diagnosis with “related to” and “as evidenced by” components 	<ul style="list-style-type: none"> Explain why the nursing diagnosis was chosen 		<ul style="list-style-type: none"> How did the patient/family respond to the nurse’s actions? Client response, status of goals and outcomes, modifications to plan.
<ol style="list-style-type: none"> Impaired mobility related to intertrochanteric fracture of the femur as evidence by loss of muscle strength, muscle mass, gait imbalances and more. 	<ul style="list-style-type: none"> A fracture of the hip puts a lot of stress on the body. This injury takes longer to heal which has a detrimental effect on mobility. 	<ol style="list-style-type: none"> Bed in low position, call light in reach, check on patient regularly. Utilization of assistive devices including; wheelchair, walker, rails, gait belt, etc. 	<ul style="list-style-type: none"> The patient uses assistive devices and will not ambulate without the help of a nurse. Goal met
<ol style="list-style-type: none"> Risk for pressure ulcer related to bedrest as evidence by pressure on a bony prominence for a long period of time and thin, dry skin. 	<ul style="list-style-type: none"> A hip fracture causes a lot of pain which causes lack of mobility. This means the patient will spend a lot of time in bed or in a 	<ol style="list-style-type: none"> Have the patient ambulate as much as possible and change positions in bed every two hours. Check skin integrity often, ensure the patients skin is clean and dry. 	<ul style="list-style-type: none"> Patient changes position often Skin integrity is checked often Skin is kept clean and dry Goal met

	wheelchair.		
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Overall APA format (5 points):

Attum, B. (2021, August 11). *Intertrochanteric femur fracture*. StatPearls [Internet]. Retrieved November 8, 2021, from <https://www.ncbi.nlm.nih.gov/books/NBK493161/>.

Chen, Y., Yang, X., Meng, K., Zeng, Z., Ma, B., Liu, X., Qi, B., Cui, S., Cao, P., & Yang, Y. (2017, October 1). *Stress-induced hyperglycemia after hip fracture and the increased risk of acute myocardial infarction in nondiabetic patients*. *Diabetes Care*. Retrieved November 8, 2021, from <https://care.diabetesjournals.org/content/36/10/3328>.

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Mostafa Gomaa, H., Abdelaleem Ali, N., El ela Ismaiel, S. A., & Mohamed, A. A. (2018). *Comparative study of the change in liver enzymes after general or spinal anesthetic techniques in patients with preoperatively elevated liver enzymes. - full text view*. Full Text View - ClinicalTrials.gov. Retrieved November 8, 2021, from <https://clinicaltrials.gov/ct2/show/NCT03421990>.

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Concept Map (20 Points):

Subjective Data

Nursing Diagnosis/Outcomes

1. The patient has impaired mobility related to intertrochanteric fracture of the femur
 - The patient stated that the pain is dull in nature and does not radiate.
 - The patient claims that there are no alleviating factors and is aggravated by movement.
 - Patient rates the pain an 8 out of 10.
2. The patient has a high risk for pressure ulcer related to bedrest.
 - Evaluation/outcome: Goals met, the patient changes position often, skin integrity is checked often, and skin is kept clean and dry.

Objective Data

Patient Information

Nursing Interventions

1. Bed in low position, call light in reach, check on patient regularly.
 - Pulse: 65 bpm (radial)
 - Blood pressure: 120/66 mmHg (right arm)
 - Respiratory rate: 18 air belt, etc.
 - Temperature: 98.1 F (temporal)
 - Oxygen: 92% (room air)
2. Utilization of assistive devices including wheelchair, walker, gait belt, etc.
 - The patient stated that the pain is dull in nature and does not radiate. She claims that there are no alleviating factors and is aggravated by movement.
 - X-ray confirmed right intertrochanteric fracture of femur.



