

Medications
Acetaminophen (Tylenol): 975 mg, oral, every 6 hours to treat pain.
Pharmacological class: Nonsalicylate, para-aminophenol derivative (Jones and Bartlett Learning, 2022).
Therapeutic class: Antipyretic, nonopioid analgesic (Jones and Bartlett Learning, 2022).
Key nursing assessment: Monitor liver function test results such as AST, ALT, bilirubin, and creatinine levels because acetaminophen may cause hepatotoxicity. (Jones and Bartlett Learning, 2022). Make sure daily dose does not exceed maximum daily limits. (Jones and Bartlett Learning, 2022).
amlodipine (NORVASC): 10 mg tablet, oral, take daily to control hypertension.
Pharmacological class: Calcium channel blocker (Jones and Bartlett Learning, 2022).
Therapeutic class: Antihypertensive (Jones and Bartlett Learning, 2022).
Key Nursing Assessments: Use amlodipine cautiously in patients with heart block, heart failure, impaired renal function, hepatic disorder, or severe aortic stenosis (Jones and Bartlett Learning, 2022). Monitor blood pressure while adjusting dosage.
acetylsalicylic acid (Aspirin chew tablets): 81 mg, oral, take nightly to relieve pain.
Pharmacological class: Salicylate (Jones and Bartlett Learning, 2022).
Therapeutic class: NSAID (Jones and Bartlett Learning, 2022).
Key Nursing Assessments: Ask patient about tinnitus, dosage above therapeutic effect may cause tinnitus. Use immediate release aspirin for rapid onset such as MI or before percutaneous coronary intervention (Jones and Bartlett Learning, 2022).
atorvastatin (LIPITOR): 40 mg, oral, take nightly to control lipid levels.
Pharmacologic class: HMG-CoA reductase inhibitor (Jones and Bartlett Learning, 2022).
Therapeutic class: Antihyperlipidemic (Jones and Bartlett Learning, 2022).
Key Nursing Assessments: Expect to measure lipid levels 2-4 weeks after therapy starts, to adjust dosage until lipid levels are within desired range. Atorvastatin may be used with colestipol or cholestyramine for additive antihyperlipidemic effects. (Jones and Bartlett Learning, 2022).
enoxaparin (LOVENOX): 40 mg, subcutaneous injection, every 24 hours to prevent deep vein thrombosis due to left hip injury.
Pharmacological class: Low-molecular-weight heparin (Jones and Bartlett Learning, 2022).
Therapeutic class: Anticoagulant (Jones and Bartlett Learning, 2022).
Key Nursing Assessments: Don't give drug by I.M. injection. Use enoxaparin with extreme caution in patients with a history of heparin-induced THROMBOCYTOPENIA (Jones and Bartlett Learning, 2022).

Demographic Data
Date of Admission: 02/09/2023
Admission Diagnosis/Chief Complaint: Acute left hip pain
Age: 81
Gender: Female
Race/Ethnicity: White/Caucasian
Allergies: No Allergies
Code Status: Full
Height in cm: 149.9 cm
Weight in kg: 75.6 kg
Psychosocial Developmental Stage: Integrity vs. Despair
Cognitive Developmental Stage: Formal Operational
Braden Score: 20
Morse Fall Score: 25
Infection Control Precautions: Standard Precautions

Pathophysiology
Disease process: Bruises as injuries can play an important role in the interpretation of the causes of death. Bruises are skin injuries that present a extravasation of blood in connective and deep tissues (Capriotti, 2022). When an elderly woman falls on her left hip and a bruise accumulates, this is showing that small blood vessels have been broken in the underlying skin and blood is surrounding the tissue (Capriotti, 2022). A cellular response is activated once infiltration of blood is recognized. Neutrophil granulocytes and macrophages rush to the site of injury. Bruises will take time to show due to opalescence of the skin, but eventually will be seen postmortem after the appearance of the skin reflection. Bruises can lead to death if they are extensive and maybe be worse with older populations (Capriotti, 2022).
S/S of disease: Pain, swelling, skin discoloration from reddish to green/brown, and tenderness (Capriotti, 2022). After head-to-toe assessment I saw a big bruise on the patients left hip. She described the pain as a "6" out of 10 and requires pain medication. Bruise was tender to touch.
Method of Diagnosis: Patient received physical examination, X-Ray to determine bone fractures, and blood test to check for clotting conditions and vitamin deficiencies.
Treatment of disease: Interventions are to be put in place to help patient recover from fall. Ambulation therapy with nurse and family will help the patient rebuild strength and promote healing. Pain medication such as Aspirin will help decrease the patients pain level to be more tolerable. Telemetry monitoring for acute ill patient with significant risk factors/comorbidities.

Lab Values/Diagnostics
BUN: 32 mg/dL (10-20 mg/dL)
Reason for abnormal: Possibly due to aging process, kidneys are not working well. May also be indicated by abnormal GFR (Capriotti, 2022).
BUN/Creatinine ratio: 35 ratio (12-20 ratio)
Reason for abnormal: Possibly due to aging process, kidneys are not working well. May also be indicated by abnormal GFR (Capriotti, 2022).
Glucose: 122 mg/dL (70-99 mg/dL)
Reason for abnormal: Patient is not a diabetic, possibly due to patient fighting an infection, diet changes, or medication (Capriotti, 2022).
GFR: 59 mL/min (>60 mL/min)
Reason for abnormal: GFR gets lower with aging, even without the patient having kidney issues or disease (Capriotti, 2022).
RBC: 3.17 mm3 (3.80 - 5.30 mm3)
Reason for abnormal: RBCs were low due to a possible vitamin B6, B12, or folate deficiency (Capriotti, 2022).
Hemoglobin: 9.4 g/dL (12.0-15.8 g/dL)
Reason for abnormal: Hemoglobin was low due to a possible vitamin B6, B12, or folate deficiency (Capriotti, 2022).
MPV: 8.0 fL (9.7-12.4 fL)
Reason for abnormal: Bone marrow may not be producing enough new platelets (Capriotti, 2022).
XR HIP 2-3 VIEWS w/ Pelvis Unilateral Left:
Impression: No recent fracture or dislocation seen. Left hip joint and bones of the pelvis are intact.
Reasoning: X-Ray shows there is no fracture or dislocation associated with the fall on her left hip.

Admission History
An 81-year-old female presents an onset of acute pain in her left hip after a fall that occurred "last Thursday morning from a throw rug in the living room". The location of her pain is in her "left hip and I feel a bit of pain around my groin". The duration of her pain has been going on since "my fall on Thursday morning". The characteristic of her pain is "sharp while moving". Aggravating factors include "moving and walking, but it's getting better". Relieving factors and treatments are "pain pills and getting a good sleep".

Medical History
Previous Medical History: Hypertension, Hyperlipidemia, GERD
Prior Hospitalizations: 02/09/2023 - Acute left hip pain
Previous Surgical History: Right Total Knee Replacement, one year later: Left Total Knee Replacement.
Social History: Reports that she has never smoked, never used smokeless tobacco. Does not drink or use drugs.

Active Orders
Diet Cardiac Restrictions: Cardiac, diet effective now to reduce sodium and fat intake, and to reduce hypertension.
LAB: CBC with diff and CMP collection (routine) for monitoring.
Therapy:
OT evaluation and treatment - Left hip pain after fall.
PT evaluation and treatment - Difficulty ambulating after fall.
PT evaluation and treatment: Left hip pain after fall.
Respiratory: Pulse Ox spot - monitor O2 levels
Other orders:
Admission weight: (Routine). Elevate head of bed: to patient comfort. Insert/Maintain peripheral IV.
Intake and Output: Number of voids and stools.
Notify Physician: for abnormal vitals
Telemetry monitoring: Acute ill patient with significant risk factors/comorbidities.
Up in chair: 2 times daily. Up w/ assistance: PRN
Vitals: Routine

Physical Exam/Assessment

General: Patient is alert and oriented (A&Ox4) with no acute distress and appropriately groomed.

Integument: Patient's temperature was 98.1 (Temporal). Patient skin is warm and dry upon palpation. Patient skin color is pink and white/normal for ethnicity. Patient's turgor was quick to return less than 2 seconds. Patient has no rashes. **Bruise noted on left hip and left palm of hand.** The Braden score was a 20. Patient has no wounds. No drains were present.

HEENT: Patient's head and neck were symmetrical. No signs of tracheal deviation. Carotid arteries palpable +2 bilaterally. Patient eyes were clear bilaterally. Patient ears were pink and warm to the touch. Patient's nose was symmetrical. Turbinates are pink and moist with no visible polyps, deformities, lesions, or discharge. Patient's teeth were well cared for. Buccal membranes are pink and moist with no visible lesions, lumps, deformities, or discharge. Uvula is midline without exudate. Tonsils are +1 with no exudate.

Cardiovascular: Heart sounds could be auscultated throughout S1, S2, S3, and S4. **Systolic murmur detected.** Capillary refill was less than 3 seconds. Peripheral pulses were +2 bilaterally in all extremities. No neck vein distention. No edema is present bilaterally.

Respiratory: Respiratory rate was within normal limits. No accessory muscle use. Lung sounds were clear throughout bilaterally.

Genitourinary: Color is within normal limits. Quantity of urine is within normal limits. No pain with urination. Patient does not have a catheter. Patient is not on dialysis.

Gastrointestinal: Patient is on a low salt diet at home. In the hospital she is on a cardiac diet. Height is 149.9 cm. Weight is 75.6 kg. Bowel sounds are normoactive in all four quadrants. Last BM: 1 day ago Abdomen is soft, nontender, no organomegaly or masses noted upon palpation of all four quadrants. No CVA tenderness noted bilaterally. No feeding tubes in place and no ostomy bag in place. No distention, incisions, scars, drains, or wounds upon inspection. No NG tube in place. No feeding tubes in place.

Musculoskeletal: Neurovascular status is normal to the patient. Patient has full range of motion with a walker as an assistive device. Strength is good/normal to patient. Patient needs assistance with ADL's. Patient is a fall risk with a score of 25. Patient needs support to stand and walk but can walk on her own for a limited time.

Neurological: Patient moves all extremities well. PERRLA intact bilaterally. Patient's speech is clear. Patient is alert and oriented to person, place, and situation. Strength is equal. Speech is within normal limits. Sensory within normal limits. LOC is within normal limits.

Most recent VS (include date/time and highlight if abnormal):

BP: 113/96

HR: 82

TEMP: 98.1

O2%: 95% RA

RR: 20

Pain and pain scale used: Numeric pain scale 1-10 was used. Patient states "7" on pain scale with sharp pain.

<p align="center">Nursing Diagnosis 1</p> <p align="center">Risk for fall related to recent left hip injury as evidence by shuffling and imbalanced gait (Phelps, 2020).</p>	<p align="center">Nursing Diagnosis 2</p> <p align="center">Risk for bone density loss related to active use of lipitor as evidence by hyperlipidemia.</p>	<p align="center">Nursing Diagnosis 3</p> <p align="center">Risk for aspiration related to GERD as evidence by heartburn and reflux (Phelps, 2020)</p>
<p align="center">Rationale</p> <p>Patient has trouble ambulating with recent fall.</p>	<p align="center">Rationale</p> <p>lipitor in higher doses has been known to cause potential osteoporosis/osteoarthritis. (Patient has osteoarthritis in both hands and fingers).</p>	<p align="center">Rationale</p> <p>Patient often experiences heartburn and has a decreased gag reflex.</p>
<p align="center">Interventions</p> <p>Intervention 1: Patient's nurse or daughter helps patient with ambulating to rebuild strength.</p> <p>Intervention 2: Teach patient on getting rid of throw rugs and objects that increase fall risk. Use call light when needing assistance when daughter is absent.</p>	<p align="center">Interventions</p> <p>Intervention 1: Patient is placed on cardiac diet to reduce sodium and fat intake.</p> <p>Intervention 2: Monitor lipid panel for changes with medication/dosage changes.</p>	<p align="center">Interventions</p> <p>Intervention 1: Instruct patient to eat slow and chew food longer for adequate breakdown (Phelps, 2020).</p> <p>Intervention 2: Elevate HOB while in bed to prevent aspiration and gastric acid from flowing back into the esophagus (Phelps, 2020).</p>
<p align="center">Evaluation of Interventions</p> <p>Patient was optimistic and wanted to rebuild her strength so she can go back home. Daughter will help rearrange house to reduce the risk of the patient falling again.</p>	<p align="center">Evaluation of Interventions</p> <p>Patient has trouble with keeping up with all her medication. The nurse and daughter will work with the patient to make sure cholesterol levels are within a desired range and routine testing is completed.</p>	<p align="center">Evaluation of Interventions</p> <p>Patient understood the need to chew her food longer and allowed assistance with positioning and elevation of her bed.</p>

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Key nursing assessment: Monitor liver function test results such as AST, ALT, bilirubin, and creatinine levels because acetaminophen may cause hepatotoxicity. (Jones and Bartlett Learning, 2022). Make sure daily dose does not exceed maximum daily limits. (Jones and Bartlett Learning, 2022).

amlodipine (NORVASC): 10 mg tablet, oral, take daily to control hypertension.

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Key Nursing Assessments: Don't give drug by I.M. injection. Use enoxaparin with extreme caution in patients with a history of heparin-induced THROMBOCYTOPENIA (Jones and Bartlett Learning, 2022).

hydroCHLORothiazide tablet (Microzide): 12.5 mg, oral, take daily, give with lisinopril 20 mg for zestoretic 20/12.5 mg to manage hypertension.

Pharmacological class: Thiazide diuretic (Jones and Bartlett Learning, 2022).

Therapeutic class: Diuretic (Jones and Bartlett Learning, 2022).

Key Nursing Assessments: Give hydrochlorothiazide in the morning and evening to avoid nocturia. Monitor BP, daily weight, fluid I&O, and serum levels of electrolytes. Assess for signs of hypokalemia such as weakness or muscle spasms. (Jones and Bartlett Learning, 2022).

Lidocaine (Lidoderm) 5%: 1 patch, transdermal, every 24 hours on left hip, remove after 24 hours. To treat ventricular arrhythmias.

Pharmacological class: Amide derivative (Jones and Bartlett Learning, 2022).

Therapeutic class: Class IB antiarrhythmic (Jones and Bartlett Learning, 2022).

Key Nursing Assessments: Observe for respiratory depression after bolus injection and during I.V. use in case of respiratory or other reactions. Titrate I.V. dose to the minimum amount needed to prevent arrhythmias (Jones and Bartlett Learning, 2022).

lisinopril (Prilivil): 20 mg, oral, give with hydroCHLORohiazide 12.5 mg for zestoretic 20/12.5 mg to treat hypertension.

Pharmacological class: Angiotensin-converting enzyme (ACE) inhibitor (Jones and Bartlett Learning, 2022).

Therapeutic class: Antihypertensive (Jones and Bartlett Learning, 2022).

Key Nursing Assessment: Use lisinopril cautiously in patients with severe aortic stenosis or hypertrophic cardiomyopathy because hypotension could occur. Monitor blood pressure often especially when dosage changes (Jones and Bartlett Learning, 2022).

metoprolol tartrate (LOPRESSOR): per half tab 12.5 mg, oral, 2 times daily to manage hypertension.

Pharmacologic class: Beta1-adrenergic blocker (Jones and Bartlett Learning, 2022).

Therapeutic class: Antianginal, antihypertensive (Jones and Bartlett Learning, 2022).

Key Nursing Assessments: Use cautiously in patients with angina or hypertension who have congestive heart failure because beta-blockers such as metoprolol can further depress myocardial contractility, worsening heart failure (Jones and Bartlett Learning, 2022).

pantoprazole (Protonix): 40 mg tablet, oral, take daily to treat GERD.

Pharmacologic class: Proton pump inhibitor (Jones and Bartlett Learning, 2022).

Therapeutic class: Antiulcer (Jones and Bartlett Learning, 2022).

Key Nursing Assessment: Monitor the patient's urine output, pantoprazole may cause acute intestinal nephritis. Pantoprazole should not be given longer than necessary. Administer delayed-release oral suspension 30 minutes before a meal mixed in apple sauce (Jones and Bartlett Learning, 2022).

References (3) (APA):

Capriotti, T., & Frizzell, J. P. (2022). *Pathophysiology: Introductory concepts and clinical perspectives*. F.A. Davis Company.

Phelps, L. L. (2020). In *Sparks & Taylor's nursing diagnosis reference manual* (11th ed.), Wolters Kluwer.

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