N311 Care Plan 5

Ginaveve Jessup

Lakeview College of Nursing

N311: Foundations of Professional Practice

Professor Smalley

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Demographics (5 points)

Date of Admission 3/29/2024	**Client Initials** B.L.	**Age** 81 years old	**Gender** Female
Race/Ethnicity White	**Occupation** Retired	**Marital Status** Widowed	**Allergies** No allergies noted or stated by the client
Code Status Full Code	**Height** 5’6”	**Weight** 159 lbs	

Medical History (5 Points)

Past Medical History: There is no known dates for this medical history

- Diabetes
- Hypertension
- Chronic lower back pain
- Dementia

Past Surgical History: There are no known dates for this surgical history

- Joint replacement.
- Left knee replacement.
- Right knee replacement.
- Hip replacement.

Family History:

- Mother (cancer, diabetes, and hypertension)
- Father (heart attack)
- Brother (hypertension)

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use):

History of smoking cigarettes. She stated she smoked half a pack a day for 60 years. States she is not ready to quit.

Admission Assessment

Chief Complaint (2 points): Fainting (syncope)

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

B.L. was admitted to the emergency department via ambulance from her home in Sidell. The client had a fall the night before she arrived at the hospital and was lying on the floor for around 12 hours when her family found her. The patient stated her lower back and tailbone were in pain from her fall. She described feeling an overall generalized weakness. The patient was started on some pain medication after she arrived at the hospital where she stated her pain was a 10/10. The medication was able to relieve her back pain that resulted from her fall. The sister-in-law was at the bedside during this assessment and stated B.L. was “confused when they found her”. The healthcare team suspected the patient may have hit her head. No other associated or aggravating factors were associated with her chief complaint. The characteristics of her pain were an aching and dull pain in her lower back area and the pain medication given to her at the hospital helped.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Rhabdomyolysis

Secondary Diagnosis (if applicable):

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

Rhabdomyolysis refers to the process of the breakdown of skeletal muscle, which is distinguished by the liberation of numerous muscle cell components, such as sarcoplasmic proteins, myoglobin, and electrolytes, into the extracellular water and bloodstream (Stanley et al., 2023). There can be possible damage to the kidneys and heart when there is a shift in electrolytes and affecting homeostasis. The etiology of rhabdomyolysis can be determined with the use of a thorough history, physical examination, and laboratory workup. Two general

categories can be used to classify the etiology of rhabdomyolysis: nontraumatic or nonphysical as well as traumatizing or physical. Rhabdomyolysis that is from traumatic causes includes vehicular accidents, abuse, immobilization, fire accidents, electric shock, and strenuous exercise. Rhabdomyolysis can occur from nontraumatic sources such as imbalances in the supply and demand of oxygen, changes in electrolytes, and abnormalities in metabolism. This can be from medication, infection, or supplements. Although there are several reasons why rhabdomyolysis occurs, direct muscle cell damage or a breakdown in the energy supply within the muscle cell is the last prevalent mechanism that leads to dying tissue and damage to the muscle. Low intracellular/sarcoplasmic sodium, calcium, and high potassium concentrations are maintained in the resting muscle via the Na+/K+ pump and sodium-calcium converter on the sarcoplasmic membrane. Adenosine triphosphate (ATP) is used actively during muscle contraction when an excess of calcium enters the sarcoplasm and forms an actin-myosin connection. An injury that tampers with the plasma membrane, ATP, or ion channels causes the intracellular electrolyte balance to be lost. A muscle cell's intracellular calcium and sodium exchange is caused by a shortage of ATP. With salt, water is pulled into the cell, resulting in cell enlargement and the breakdown of membranous and intracellular structures. A surplus of intracellular calcium also stimulates proteases and phospholipases that are reliant on calcium, which leads to the disintegration of cell membranes and the breakdown of ion channels. As leukocytes go into injured muscle, more prostaglandins, free radicals, and cytokines are produced. This results in more myolysis (muscle breakdown) and fiber necrosis in the muscle, as well as the release of breakdown products into the circulation such as potassium and myoglobin.

In practice, the signs and symptoms of rhabdomyolysis are myalgia, weakness, and myoglobinuria—which manifests as tea-colored urine—are the three indications of

rhabdomyolysis (Capriotti, 2020). Dark urine is the first symptom to appear in over 50% of patients, who do not report muscular weakness or discomfort. The most sensitive laboratory test for assessing a muscular injury with the potential to result in rhabdomyolysis is an increased creatine kinase (CK) level (assuming no concurrent heart or brain damage). About half of individuals with rhabdomyolysis have muscle discomfort, which is the most frequent first symptom (Stanley et al., 2023). Muscle cramps, stiffness, edema, weakness, malaise, nausea, palpitations, stomach discomfort, and fever are examples of nonspecific symptoms that may exist.

The only way to determine the diagnosis of rhabdomyolysis is to do a blood test for the protein creatinine kinase (CDC, 2023). This protein is released in the blood once the muscles are injured. The level of creatinine kinase will be increased, meaning the diagnosis of rhabdomyolysis. A urine test that tests for myoglobin in the urine is used as well (Cleveland Clinic, 2023). Myoglobin is a component of muscle protein that gets in the bloodstream and in the urine after the muscle breakdown. A physical exam is encouraged but not used to diagnose rhabdomyolysis. A diagnostic test is not utilized when determining the diagnosis of rhabdomyolysis but sometimes it is important when ruling out any injury with the patient. With my patient, she was given a series of CTs and MRIs to determine any serious injuries since she had a fall, resulting in rhabdomyolysis. The health care team also did a blood test determining her CPK levels which were 1,936 on admission, which led to her diagnosis of rhabdomyolysis.

Treatment for rhabdomyolysis can be treated with fluids, rest, and relaxation for less severe cases (CDC, 2023). But if the case of rhabdomyolysis is severe, there may be some IV fluids administered in a hospital setting. These fluids may help with the complications that can arise from rhabdomyolysis such as kidney issues and heart issues, but in all it helps flush out the

products from the muscle breakdown. The treatment my patient received was IV fluids. She was not on IV fluids when I was there during my shift, but I was able to observe in her chart that she was on fluids.

Pathophysiology References (2) (APA):

Capriotti, T. (2020). *Davis Advantage for Pathophysiology: Introductory Concepts and Clinical Perspectives* (2nd ed.). F.A. Davis Company.

Rhabdomyolysis: Symptoms, Causes & Treatments. (2023, February 24). Cleveland Clinic. Retrieved April 17, 2024, from https://my.clevelandclinic.org/health/diseases/21184-rhabdomyolysis#symptoms-and-causes

Stanley, M., Chippa, V., Aeddula, N.R., Quintanilla Rodriguez, B.S., and Adigun, R. (2023, April16). *Rhabdomyolysis.* StatPearls - NCBI Bookshelf. https://www.ncbi.nlm.nih.gov/books/NBK448168/

Symptoms: Rhabdomyolysis, CDC. (2023, February 8). Centers for Disease Control and Prevention. Retrieved April 17, 2024, from https://www.cdc.gov/niosh/topics/rhabdo/symptoms.html

Treatment: Rhabdomyolysis, CDC. (2023, February 8). Centers for Disease Control and Prevention. Retrieved April 17, 2024, from https://www.cdc.gov/niosh/topics/rhabdo/treatment.html

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	3.8-5.3 10^6/mcL	3.92	3.23	The reason for this decrease in the clients red blood cells may be due to

				their medical history of diabetes which is a chronic inflammatory disease (Leeuwen et al., 2021). Also, there may be an indication of kidney disease with low blood cells. Diabetes can lead to kidney issues which can lead to anemia (Langmaid, 2022). There may also be a decrease in the production of erythropoietin, which is produced by the kidney, which stimulates the production of red blood cells (Leeuwen et al., 2021). When there is a decrease in erythropoietin that is an indicator of kidney issues. The primary diagnosis of rhabdomyolysis affects your kidneys. The red blood cell count appears to be decreasing which is a negative sign.
Hgb	12.0-15.8 g/dL	12.1	10.2	An abnormality in hemoglobin is corresponding to red blood cells (Leeuwen et al., 2021). When there is a decrease in RBC there is decrease in hemoglobin. The patient has a history of diabetes which can lead to kidney issues which can lead to anemia (Langmaid, 2022). There may also be a decrease in the production of erythropoietin, which is produced by the kidney, which stimulates the production of red blood cells (Leeuwen et al., 2021). When there is a decrease in erythropoietin that is an indicator of kidney issues. The primary diagnosis of rhabdomyolysis affects your kidneys. The level is decreasing which is not a positive sing.
Hct	36.0-47.1%	36.3	29.6	An abnormality in hematocrit is corresponding to red blood cells (Leeuwen et al., 2021). When there is a decrease in RBC there is decrease in hematocrit. The patient has a history of diabetes which can lead to kidney issues which can lead to anemia (Langmaid, 2022). There may also be a decrease in the production of

				erythropoietin, which is produced by the kidney, which stimulates the production of red blood cells (Leeuwen et al., 2021). When there is a decrease in erythropoietin that is an indicator of kidney issues. The primary diagnosis of rhabdomyolysis affects your kidneys. The level is decreasing which is not a positive sing.
Platelets	140-440 10^3/mcL	18.1	168	
WBC	4.0-12.0 10^3/mcL	9.10	5.00	
Neutrophils	47.0-73.0%	78.1	53.4	
Lymphocytes	18.0-42.0%	12.4	31.2	
Monocytes	4.0-12.0%	8.1	11.7	
Eosinophils	0.0-5.0%	0.8	3.0	
Bands	3-5%	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	137	137	
K+	3.5-5.1 mmol/L	3.9	4.1	
Cl-	98-107 mmol/L	105	110	Increased chloride is an indication of an acute kidney issue (Leeuwen et al., 2021). With the primary diagnosis of rhabdomyolysis, it effects the kidneys excretion. The patient's history of diabetes can also have an effect the increase chloride in the blood. The chloride level seems to be increasing which is not a positive sign.
CO2	22-30 mmol/L	20	17	Carbon dioxide is decreased in someone who has a buildup of ketoacids from her acute kidney

				issues, related to her diagnosis of rhabdomyolysis, and diabetes (Leeuwen et al., 2021). It is decreasing which is not a good sign.
Glucose	70-99 mg/dL	121	110	The patient's glucose is elevated due to her history of diabetes which is appearing to be uncontrolled at the moment of these lab drawls (Leeuwen et al., 2021). The elevated glucose is also an indicator of a problem with her kidneys related to her diagnosis of rhabdomyolysis. The patients glucose level seems to be decreases in a positive direction.
BUN	10-20 mg/dL	37	37	Elevated BUN is an indicator of kidney issues (Leeuwen et al., 2021). An elevated BUN shows that there is an issue with kidney excretion. The issues with the patients kidneys may be due to her diagnosis of rhabdomyolysis which hurts the kidneys, or her history of diabetes which results in decreased renal excretion. The levels are staying the same yet still very elevated so it is not a positive sign.
Creatinine	0.60-1.00 mg/dL	2.19	1.96	An elevated creatinine is an indication of an issue with kidney function (Leeuwen et al., 2021). The patient's history of diabetes also affects their kidneys. Creatinine is elevated in rhabdomyolysis due to the electrolyte being released from the muscle damage, which is why it is increased in the blood. The level is decreasing which is a good sign.
Albumin	3.5-5 g/dL	4.2	N/A	
Calcium	8.7-10.5 mg/dL	10.7	9.7	
Mag	1.6-2.6 mg/dL	N/A	N/A	
Phosphate	2.5-4.5 mg/dL	N/A	N/A	

Bilirubin	0.2-1.2 mg/dL	1.0	N/A	
Alk Phos	40-150 u/L	48	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	
pH	5.0-9.0	N/A	N/A	
Specific Gravity	1.003-1.030	N/A	N/A	
Glucose	Neg	N/A	N/A	
Protein	Neg	N/A	N/A	
Ketones	Neg	N/A	N/A	
WBC	Neg	N/A	N/A	
RBC	Neg	N/A	N/A	
Leukoesterase	Neg	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	No growth	N/A	N/A	
Blood Culture	No growth	N/A	N/A	
Sputum Culture	Neg	N/A	N/A	
Stool Culture	Neg	N/A	N/A	

Lab Correlations Reference (1) (APA):

Langmaid, S. (2022, August 19). *Diabetes and Anemia: Know Your Risks and the Warning Signs*. WebMD. Retrieved April 10, 2024, from https://www.webmd.com/diabetes/diabetes-and-anemia

Leeuwen, A. and Bladh, M. (2021). *Davis's Comprehensive Manual of Laboratory and Diagnostic Test with Nursing Implications* (9th ed.). F.A. Davis Company.

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

- CT of head or brain without contrast on 3/29. The reason for this scan was for syncope, a cerebrovascular cause suspected.

"No intracranial hemorrhage, small lacunar infarct in left putamen could be recent or old. If an acute infarct is a strong clinical consideration MR imaging may be helpful. Marked cerebral and cerebellar atrophy and white matter ischemic changes decreased attenuation of periventricular white matter indicating small vessel disease. No skull fracture or pneumuce phallus. Craniovertebral junctions are normal. Vascular calcifications of the internal carotid artery and both vertebral arteries. Bulbar and retrobulbar regions are normal. No other significant findings." This was stated by the impression found in the electronic health record.

A computed tomography brain scan is a painless medical imaging technique. It uses certain X-ray readings to build an axial or horizontal representation of the brain (Johns Hopkins Medicine, 2024). Brain CT scans can provide greater insight into the brain's anatomy and physiological science, providing further insights into brain injuries and illnesses. When other forms of evaluation prove unsatisfactory, a CT scan of the brain may be carried out to check for tumors and other lesions, traumas, cerebral hemorrhage, and structural abnormalities, and detect a stroke or a history of a stroke. Other reasons a provider might order a CT to be completed will be if the patient is showing signs of diminished mental status, slurred speech, falls, dysphagia,

etc. (Leeuwen et al., 2021). In my patient's case, the reason for her CT scan was to rule out and determine there was no other worsening head injury to due her fall from passing out.

- XR lumbar spine 2 or 3 views on 3/29. The reason for this test was her fall.

"No acute fracture or dislocation. Severe degenerative disc cc with narrowing of the disc spaces from L2-S1. Calcification of the abdominal aorta without abdominal aortic aneurysm. Non-specific bowel gas pattern." This was stated by the impression found in the electronic health record.

An X-ray is an electromagnetic radiation (National Institute of Biomedical Imaging and Bioengineering, 2022). X-rays are used to take photographs of the organs, tissues, and bones inside the body. It will create a picture that depicts a shadow, and appears white and grey, which is the inside of your body. An X-ray will be able to tell us about a spinal disorder, a damaged or out-of-place disc, broken or fractured bones, tumors, etc. (Cleveland Clinic, 2023). When it comes to this section of the spine, it is your lower back. In my patient's case, the reason for this X-ray was because of her fall to see if she had any broken bones or fractures in her back. She was complaining of back pain on admission from her fall.

- XR thoracic spine complete 3 views on 3/29. The reason for this was the fall to rule out a fracture.

"Marked determinative changes of dorsal soon d with narrowing of the disc spaces from T4-T12. No paravertebral soft tissue mass. No acute fracture or dislocation. Calcification of the abdominal aorta and thoracic aorta. Visualized lungs are clear." This was stated by the impression found in the electronic health record.

(An explanation for this test is stated above. Professor Smalley said I could just use it for all three since it is the same). In my patient's case, the reason for this X-ray was to rule out any further issues from her fall. She was complaining of back pain from her fall on admission. This section of the spine is the upper and middle of your back.

- XR cervical spine. The reason was for a history of a fall on 3/29.

"Cervical spondylotic changes with narrowing of the disc spaces from C3-C6 with anterior and posterior osteophytes minimal retrolisthesis of C5 over C6, C7-T1 region is not clearly demonstrated. No gross evidence of acute fracture or dislocation." This was stated by the impression found in the electronic health record.

(An explanation for this test is stated above. Professor Smalley said I could just use it for all three since it is the same). The patient's reason for this X-ray was from her fall to rule out any other issues with her back and neck. The patient was complaining of back pain on admission and this cervical spine X-ray, was able to observe her neck for any injuries.

- MRI brain without cervical on 4/1. The reason for this was for a comparison to the one done on 3/29, and syncope and cerebrovascular disease.

"No enhancing lesions. No diffusion abnormalities. Craniovertebral junctions is normal old lacunar infarcts in the left basal ganglia region. Normal major intracranial flow voids. Extensive white matter ischemic changes with bright signal areas in the periventricular and subcortical and deep white matter. Also, there is a small lacunar infraction in the right basal ganglion." This was stated by the impression found in the electronic health record.

An MRI (Magnetic resonance imaging) is used to examine and observe inside organs and structures for unusual characteristics, illnesses, infections, or cancer (Leeuwen et al., 2021). It is a tool for treating and diagnosing illnesses. A brain MRI is used to diagnose and observe

the structures of your head. A brain MRI can detect tumors, changes in dementia patients, tissue lesions, and bleeding in the brain. The reason my patient had this test done was because of her fall. This was done with the idea of it being compared to the CT done beforehand. This test would provide better accuracy with imaging.

- MRI L-spine without contrast on 4/1 and the reason was for low back pain.

"No evidence for acute and fart or intracranial hemorrhage or extra-axial, fluid collection, or midline shift or mass effect. Severe degenerative disc disease with narrowing of the disc spaces with bulging discs at L3-4 L4-5 L5-S1. Asymmetrical disc bulging in the left side with left neural foraminal encroachment at L4-5 with posterior lateral indentation over the thecal sac bilaterally at L4-5 with moderate spinal canal stenosis at L4-5. Diffuse bulging disc with degenerative disc disease at L5-S1 with left neural foraminal encroachment. Facets arthritis. Mild central spinal canal stenosis at the narrowing of the disc space. No central spinal canal stenosis. Bulging disc without focal disc protrusion, extrusion. No central spinal stenosis. l2-3 anterior osteophytes at L2-3. Mild diffuse disc (bulging) at T11-T13 and L1-L2 without focal disc protrusion of extension." This was stated by the impression found in the electronic health record.

Using magnetic resonance imaging, or MRI, one may see into organs and structures to check for anomalies, diseases, infections, or cancer (Leeuwen et al., 2021). A spinal MRI is used to detect issues such as a herniated disc, compression or narrowing of the spinal cord or a tumor. In my patient's case, this test was done because of her back pain due to her fall. There were some significant findings with this diagnostic test, allowing for better plan of care.

Diagnostic Imaging Reference (1) (APA):

Computed Tomography (CT or CAT) Scan of the Brain. (2024). Johns Hopkins Medicine. Retrieved April 10, 2024, from https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/computed-tomography-ct-or-cat-scan-of-the-brain

Leeuwen, A. and Bladh, M. (2021). *Davis's Comprehensive Manual of Laboratory and Diagnostic Test with Nursing Implications* (9th ed.). F.A. Davis Company.

Medical X-rays. (2022, June). National Institute of Biomedical Imaging and Bioengineering. Retrieved April 9, 2024, from https://www.nibib.nih.gov/science-education/science-topics/x-rays

Spine X-Ray: What It Is, Purpose, Procedure, Results & Types. (2023, September 1). Cleveland Clinic. Retrieved April 10, 2024, from https://my.clevelandclinic.org/health/diagnostics/10229-spine-x-ray

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

Medications (5 required)

Brand/Generic	Carvedilol, (COREG)	Enoxaparin, (LOVENOX)	magnesium hydroxide, MILK of magnesium	amlodipine, NORVASC tablet	sodium bicarbonate tablet (Sellymin)
Dose	12.5 mg	30 mg	30 mL 400mg/5mL	5mg	650mg
Frequency	2 times daily	Every 24 hours, daily	Daily, PRN	Daily	3 times daily
Route	Oral	Injection, subcutaneous	Oral, suspension	Oral	Oral

Classification	The classification of this medication is nonselective beta blocker and alpha-1 blocker (Pharmacologic) and antihypertensive, heart failure treatment adjunct (Therapeutic class) (Jones and Bartlett, 2023).	The classification of the medication is low-molecular-weight heparin (Pharmacologic) and anticoagulant (therapeutic class) (Jones and Bartlett, 2023).	The classification of this medication is mineral (pharmacologic) and electrolyte replacement (therapeutic class) (Jones and Bartlett, 2023).	The classification for this medication is a calcium channel blocker (Pharmacologic) and antianginal or antihypertension (Therapeutic) (Jones and Bartlett, 2023).	The classification for this medication is an electrolyte (Pharmacologic) and antacid, electrolyte replenisher, systemic and urinary alkalizer (Therapeutic) (Jones and Bartlett, 2023).
Mechanism of Action	Lowers blood pressure and the cardiac workload by reducing peripheral vascular resistance, decreasing cardiac output, and causing vasodilation due to tachycardia (Jones and Bartlett, 2023). The drug lowers plasma renin activity when used for a minimum of 4 weeks.	Enoxaparin increases the coagulation inhibitor antithrombin III's effects (Jones and Bartlett, 2023). Enoxaparin binds to antithrombin III and quickly removes coagulation factors from the body. No thrombus can form, or fibrinogen be converted to fibrin without thrombin.	The small intestine has a hyperosmotic response from magnesium (Jones and Bartlett, 2023). Cholecystokinin is secreted by the duodenum and the bow is widened because of water retention. This chemical promotes intestinal motility and fluid output.	Blocks the entrance of external by attaching to “dihydropyridine and non-dihydropyridine cell membrane receptor sites on vascular and cardiac smooth muscle cells” (Jones and Bartlett, 2023, p. 68)., calcium ions are released via slow calcium channels (Jones and Bartlett, 2023). By relaxing	Metabolic acidosis is reversed by the process of buffering more hydrogen ions, resulting in an elevation of blood pH and plasma carbonate levels (Jones and Bartlett, 2023). Additionally, bicarbonate of sodium increases the elimination of free ions of bicarbonate, which elevates

				smooth muscles and preventing smooth muscle cell spasms, this lowers intracellular calcium levels, lowers the resistance of peripheral arteries, and lowers blood pressure in both directions. Additionally, it lessens chest discomfort and the burden for the heart's oxygen need.	urine's pH and makes it more alkaline, which may help dissolve uric acid stones. Additionally, by raising the pH of the gastric contents and neutralizing or buffering the stomach acid already there, it will leave excessive acidity symptoms alone.
Reason Client Taking	The client is taking this medication because of her medical history of hypertension (Jones and Bartlett, 2023).	The client is taking this medication to reduce and prevent her risk of a deep vein thrombosis (Jones and Bartlett, 2023). Her primary diagnosis of rhabdomyolysis, she was experiencing muscle weakness and slight	The client is taking this medication as a used of a laxative (Jones and Bartlett, 2023). This medication is used to treat constipation.	The client is taking this medication for her medical history of hypertension (Jones and Bartlett, 2023).	The client is taking this medication for their indigestion (Jones and Bartlett, 2023).

		restriction in her mobility, which can lead to a DVT.			
Contraindications (2)	Hypersensitivity to carvedilol and severe hepatic impairment (Jones and Bartlett, 2023).	Hypersensitivity to heparin and enoxaparin (Jones and Bartlett, 2023).	Abdominal pain or severe renal impairment (Jones and Bartlett, 2023).	"Hypersensitivity to amlodipine or its components" (Jones and Bartlett, 2023, p. 68).	Chloride loss and hyperchloremic loss (Jones and Bartlett, 2023).
Side Effects/Adverse Reactions (2)	Heart failure and renal insufficiency (Jones and Bartlett, 2023).	Peripheral edema and anemia (Jones and Bartlett, 2023).	Hypotension and syncope (Jones and Bartlett, 2023).	Hypotension and chest pain (Jones and Bartlett, 2023).	Irregular heartbeat and abdominal cramps (Jones and Bartlett, 2023).

Medications Reference (1) (APA):

Bartlett & Jones. (2023). *Nurses Drug Handbook* (22nd ed.). Jones and Bartlett Learning.

Assessment

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

GENERAL: **Alertness: Alert** **Orientation: To person, place, and time** **Distress: No acute distress** **Overall appearance: Normal appearance and appropriate for age. Appears well groomed.**	
INTEGUMENTARY: **Skin color: Pale** **Character: Skin appears well kept, nails are well kept, with some scars present on both knees.** **Temperature: Skin is warm to touch yet**	**Patients skin color is pale, well kept, warm and dry to the touch. Nails are well kept with scars on both knees. Hands were cold. Skin turgor is normal mobility and recoils immediately. Capillary refill is less than 3 seconds on fingers and toes bilaterally. Patient**

hands were chilly. Skin is dry. **Turgor: Recoils immediately.** **Rashes: No rashes noted** **Bruises: Bruise noted on left elbow and on left hand** **Wounds: no wounds noted** **Braden Score: 19** **Drains present: Y☐ N ☒** **Type:**	**has bruises on left elbow as well as left hand from precious IV stick. Patient had an IV line in right hand but it is not hooked up. Nails are without cyanosis or clubbing. Facial hair is present on patients chin.**
HEENT: **Head/Neck: Head is normocephalic and atraumatic.** **Ears: No drainage or lesions on the ears.** **Eyes: PERRLA and EOMS are intact** **Nose: NO bleeding or drainage noted.** **Teeth: Well kept, dentures.**	**Patients head is normocephalic and atraumatic, no drainage or lesions on the ears. PERRLA and EOMS are intact, no bleeding or drainage noted on the nose. Oral mucosa is pink, moist, and intact. Patient has dentures are appear intact and well taken care of. No or jugular vein distension.**
CARDIOVASCULAR: **Heart sounds: Clear S1 and S2 with no murmurs present.** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses: Pulses are palpable** **Capillary refill: less than 3 seconds** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	**Patients S1 and S2 are clear with no murmurs noted or heard. Pulses were palpable +2. PMI is palpable at 5th intercostal space. Capillary refill is less than 3 seconds. No neck vein distension or edema noted.**
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	**Normal breath sounds with no crackles, wheezes or rhonchi. Lung sounds were clear and nonlabored anteriorly and posteriorly bilaterally. O2 saturation was 97% on room air. No use of accessory muscles when breathing.**
GASTROINTESTINAL: **Diet at home: normal** **Current Diet: general diet** **Height: 5'6"** **Weight: 159 pounds** **Auscultation Bowel sounds: normoactive in all four quadrants** **Last BM: yesterday, April 3rd** **Palpation: Pain, Mass etc.: no pain upon palpation.** **Inspection: no lesions** **Distention: no distension noted**	**Patient is on a normal diet at home and eats "whatever she wants" and was on a general diet in the hospital. She had already eaten breakfast when I spoke to her in the morning and was not ready for lunch when I was leaving for my shift. She is 5'6" and 159 pounds. The auscultation of her bowel sounds was normoactive in all four quadrants and her last BM was April 3rd. The abdomen was soft and non-tender upon palpation. There was no pain upon palpation. I inspected no lesion, distension, scars, incisions, drains or wounds**

Incisions: no incisions noted **Scars: no scars observed** **Drains: no drains noted** **Wounds: no wounds observed** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	**upon inspection. The patient did not have an ostomy, nasogastric or a feeding tube.**
GENITOURINARY: **Color: yellow** **Character: clear** **Quantity of urine: N/A** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	**I was not able to observe the patient's urine, as they were able to ambulate to and from the restroom with a walker. They were not on an external or internal catheter while I was taking care of them. The patient stated to me her urine was "normal yellow".**
MUSCULOSKELETAL: **Neurovascular status: alert and intact** **ROM: normal** **Supportive devices: walker at home** **Strength: declined slightly but can bear weight and walk with assistive device** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score: 85** **Activity/Mobility Status: The clients activity status is normal** **Independent (up ad lib) ☐** **Needs assistance with equipment ☒** **Needs support to stand and walk ☒**	**I was able to observe the patients gait as they were walking with physical therapy. I observed a smooth yet shuffle gait with the client ambulating with a walker. All extremities have normal and full range of motion, and she is alert. The client is able to bear weight and can walk short distances without a walker. Hand grips, pedal pushes and pulls are normal and equal strength.**
NEUROLOGICAL: **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	**This section was waived by Professor Smalley.**
PSYCHOSOCIAL/CULTURAL:	**She stated she "cries and says a few bad**

Coping method(s): She stated she "cries and says a few bad words" sits by her dog, Maddie. **Developmental level: appropriate for her age** **Religion & what it means to pt.: she grew up catholic but does not practice or attend church.** **Personal/Family Data (Think about home environment, family structure, and available family support): she lives alone with her dog Maddie. She is widowed and she had no children. She has one brother who lives up in Northern Illinois.**	**words" sits by her dog, Maddie. She will also watch TV or take a nap. Her developmental level is appropriate for her age. She grew up catholic but does not practice or attend church. She lives alone with her dog Maddie. She is widowed and she had no children. She has one brother who lives up in Northern Illinois. Her sister-in-law has been by her side ever since her fall and seems very involved in her health. Her parents have passed. She was very easy to talk to and very cooperative with the assessments.**

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1117	**61 bpm**	**147/87 mm Hg**	**15 breaths per minute**	**97.0 F**	**97%**

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1113	**Numeric**	**Lower back for about 25-30 years**	**2/10**	**Aching, hurting pain**	**Tylenol and Tramadol was given to her at the hospital after her fall.**

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
100% of breakfast **560 of liquid (coffee or water)** **(I was not present when she was getting IV fluids, so I am not aware of the amount she received. I was not present when she began**	**The patient was able to ambulate and go to the bathroom by herself during my shift. She went to the restroom 2 times during my shift. There was no measurement of urine.**

eating lunch either.)	

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. Impaired physical mobility related to falls as evidence by shuffled and altered gait (Phelps, 2023).	I chose this nursing diagnosis because impaired physical mobility is a cause and or problem resulting from rhabdomyolysis .	1. Identify the level of functioning mobility (Phelps, 2023). 2. Refer patient to the physical therapist for mobility development (Phelps, 2023).	The patient will maintain and increase muscle strength with the help of physical therapy and be able to perform range of motion exercises actively by the end of her hospital stay (Phelps, 2023).	The client was very cooperative in her innervations and plan of care. She was very involved with her care as well as her sister-in-law. The goal for this patient was met as she was able to use a walker without assistance with physical therapy. The interventions put in place for this client were

				helpful in the progress of this patient's diagnosis and she showed improvement throughout her stay.
2. Deficit fluid volume related to disease process as evidence by electrolyte imbalances (Phelps, 2023).	I chose this nursing diagnosis because abnormal fluid volume is common in patients with the diagnosis of rhabdomyolysis .	1. Monitor and record vitals every 2 hours (Phelps, 2023). 2. Administer fluids to replace fluid loss and to promote movement of fluid (Phelps, 2023).	The patients' vitals will remain stable and their fluid and blood volume will return to normal limits by the end of their hospital stay (Phelps, 2023). The clients BUN and creatinine levels will be within the normal limits by the end of her stay.	The client was very cooperative in her intervations and plan of care. She was very involved with her care as well as her sister-in-law. The patient was able to meet her goal of a normal fluid volume and have normal vitals that were recorded every 2 hours but had an elevation in her blood pressure by the end of her stay. The client was not able to meet the normal limits of BUN and creatinine by the end of her stay. The interventions put in place for this client were helpful in the progress of her diagnosis throughout her stay.

Other References (APA):

Phelps, L. L. (12th ed.) (2023). *Nursing Diagnosis Reference Manual*. Wolters Kluwer.

Concept **Map (23 Points):**

Subjective Data

- Pain 10/10 on admission and 2/10 on the day of discharge. Pain in the lower back is described as an aching, hurting pain.
- Psychosocial history, from Sidell
- OLDCARTS
- Past occupation, family history and information
- Past surgical history

Objective Data

- Past medical history
- Gait and abnormal assessment of skin, head, and musculoskeletal.
- Normal assessment of heart, lungs, gastrointestinal, general, urinary and psychosocial.
- Abnormal labs of RBC, HCT, Hgb, Cl-, CO2, Glucose, BUN, and Creatinine
- I observed her abnormal and normal diagnostic tests such as a CT and MRI
- Vitals of the patient where her BP was slightly elevated at 147/87
- Intake of food
- Medications with the dosages, frequency, route, and brand.

Client Information

B.L. is a 81 year old white female admitted on 3/29 because of a fall and being diagnosed with rhabdomyolysis. She is compliant with the plan of care. She is 5'6" and 159 pounds. She has a medical hx of diabetes, hypertension, and chronic lower back pain as well as possible dementia. She has a past surgical hx of a joint replacement.

Nursing Diagnosis/Outcomes

Impaired physical mobility related to falls as evidence by shuffled and altered gait (Phelps, 2023).

- The patient will maintain and increase muscle strength with the help of physical therapy and be able to perform range of motion exercises actively by the end of her hospital stay (Phelps, 2023).

Deficit fluid volume related to disease process as evidence by electrolyte imbalances (Phelps, 2023).

- The patients' vitals will remain stable and their fluid and blood volume will return to normal limits by the end of their hospital stay (Phelps, 2023). The client's BUN and Creatinine levels will be within the normal limits by the end of the stay.

Nursing Interventions

- Identify the level of functioning mobility (Phelps, 2023).
- Refer the patient to the physical therapist for mobility development (Phelps, 2023).
- Monitor and record vitals every 2 hours (Phelps, 2023).
- Administer fluids to replace fluid loss and to promote movement of fluid (Phelps, 2023).