

N431 Care Plan #1

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Lakeview College of Nursing

N431: Adult Health II

Professor Smalley

June 5th, 2023

Demographics (3 points)

Date of Admission 06/01/2023	Client Initials M.J.	Age 67 y/o	Gender Female
Race/Ethnicity Caucasian	Occupation Retired Nurse	Marital Status Married	Allergies No known allergies
Code Status Full Code	Height 5'4"	Weight 217 lbs	

Medical History (5 Points)

Past Medical History: GERD and Seizure

Past Surgical History: Lumbar Discectomy; Total Knee Arthroplasty (Left, 2007);

Hysterectomy; Cholecystectomy; Colonoscopy (08/14/2017); Upper Gastrointestinal Endoscopy (05/14/2021); Rotator Cuff Repair (Right, 12/19/2022); Shoulder Adhesion Release (Right, 03/23/2023); Total Knee Arthroplasty (Right, 2023)

Family History: Mother- Congestive Heart Failure, Kidney disease, and Diabetes; Father- Heart disease

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

The patient reports that she has never smoked. She has never used smokeless tobacco. She also reports that she does not use alcohol or use drugs.

Assistive Devices: Patient didn't use any assistive devices preoperatively, but currently uses a walker with a one assist postoperatively.

Living Situation: The patient lives at home with her husband

Education Level: The patient has graduated from college and obtained a degree in nursing

Admission Assessment

Chief Complaint (2 points): Right knee pain

History of Present Illness – OLD CARTS (10 points): The patient presented to the hospital with a history of significant primary osteoarthritis of the knee (right) joint and underwent a right total knee arthroplasty. The patient recovered from anesthesia well and she is not in much pain at this time. She is on a CPM machine currently. The patient stated that she started to have arthritis of the knee 2 years ago; the arthritis is set in the patient's right knee. The patient stated that the arthritis progressed the following year after onset and then has progressed even more since then in the last year. She mentioned that the arthritis in her knee came with a constant, sharp pain when walking no matter, the distance. The patient reports that the pain was not so bad when she was sitting and at rest periods, but still was painful. The patient reports that the aggravating factor of the pain was mostly when she ambulated but was relieved whenever she would sit and ice her right knee. The patient had used home remedies as treatment prior to seeking care by taking ibuprofen for pain, icing her knee twice sometimes three times a day, and wearing a knee brace. The patient stated that the pain has become unbearable and is severe enough to affect daily living activities and spending time with her loved ones. The patient reports that the effect of her arthritis in her knee played a major part in her decision to have a total knee arthroplasty.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Arthritis of knee

Secondary Diagnosis (if applicable):

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

My patient M.J. has a primary diagnosis of arthritis of knee. According to Cleveland Clinic, osteoarthritis of the knee is cartilage in the knee joint that deteriorates and when this occurs the bones in the knee rub together causing your knees to hurt due to the

friction, which results in the knees becoming swollen or to stiffen up (Cleveland Clinic, 2021). A big risk factor is being a woman; women are more susceptible to developing osteoarthritis of the knee than men are and it usually occurs around or after 40 years old. The causes of osteoarthritis of the knee can be due to a BMI of 30 or more, an old injury to the knee, putting stress on the knee by playing sports or depending on occupation, or it can be inherited (Cleveland Clinic, 2021). The manifestations of osteoarthritis of the knee consists of stiffening and swelling of the joint making it hard to straighten out the knee or bend it, worsening pain after physical activity, weakness in the knee, and an increase in the pain with weather change (Fischer, S.J., 2023). Healthcare providers can rule out that there is arthritis of the knee by ordering an X-ray, which can show the joint space being narrow, bone changes, and bone spurs. Labs that are associated with arthritis are a complete blood count and hematocrit, which will both present low levels. Although arthritis of the knee is not curable, there is treatment that can be helpful to reduce pain and further disability. The treatments consist of losing weight, using assistive devices, applying heat or ice, taking pain medications, and knee replacement surgery to extract damaged cartilage and bone, then taking a metal or plastic joint also known as prosthetic to replace the knee and restore its function (Fischer, S.J.). My patient falls into the category of being a woman as well as having a job that is demanding on the knees, which is her being a nurse. Nurses are constantly on their feet throughout their shifts which can cause stress on the knees. My patient also has a BMI higher than 30 which contributes to stress on the knees from her body weight being carried. The manifestations that my patient presented was weakness of the knee and worsening pain after physical activity. An X-Ray and labs were completed on my patient post-op to monitor her blood count and

to visualize the prosthetic that was put in during surgery. My patient had tried treating her arthritis at home prior to considering surgery by pain medications and applying ice. The patient decided to go with a more long term treatment solution for her arthritis and undergo a total knee replacement (arthroplasty) and is currently in the recovery process.

Pathophysiology References (2) (APA):

Fischer, S. J. (2023, February). *Arthritis of the Knee - OrthoInfo - AAOS*. OrthoInfo. Retrieved June 5, 2023, from <https://orthoinfo.aaos.org/en/diseases--conditions/arthritis-of-the-knee/>

Osteoarthritis of the Knee: Symptoms, Causes and Treatments. (2021, September 8). Cleveland Clinic. Retrieved June 5, 2023, from <https://my.clevelandclinic.org/health/diseases/21750-osteoarthritis-knee>

Laboratory Data (15 points)

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	4.2-5.4 mcL	N/A	3.58 mcL	RBC levels are low due to the patient having undergone a total knee arthroplasty. This is due to intraoperative blood loss; the patient lost 100mL of blood. (Pagana, 2019)
Hgb	12-16 g/dL	N/A	11.1 g/dL	Hgb levels are low due to the patient having undergone a total knee arthroplasty. This is due to intraoperative blood loss, which results in lower-than-normal delivery of oxygen to the tissues. (Pagana, 2019)
Hct	36-47%	N/A	34.0%	Hct levels are low due to the patient

				having undergone a total knee arthroplasty. This is due to intraoperative blood loss, which results in an insufficient supply of red blood cells. (Pagana, 2019)
Platelets	150-400 mcL	N/A	221 mcL	
WBC	5-10 mcL	N/A	8.80 mcL	
Neutrophils	40-68%	N/A	75.4%	Neutrophil levels are high due to the patient having undergone a total knee arthroplasty. This is an indication of inflammation. (Pagana, 2019)
Lymphocytes	19-49%	N/A	13.7%	Lymphocyte levels are low due to the patient having undergone a total knee arthroplasty. This is an indication of inflammation. (Pagana, 2019)
Monocytes	4.0-12.0%	N/A	9.3%	
Eosinophils	0-8.0%	N/A	1.1%	
Bands	0-6%	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	N/A	134 mmol/L	Na- levels are low due to the patient having undergone a total knee arthroplasty; surgical stress can result in an inappropriate antidiuretic hormone and since the patient is a woman, she is more susceptible of this because of women already having smaller fluid volume and other sex related hormonal factors. (Pagana, 2019)
K+	3.5-5 mmol/L	N/A	4.0 mmol/L	

Cl-	98-106 mmol/L	N/A	100 mmol/L	
CO2	23-30 mmol/L	N/A	27 mmol/L	
Glucose	74-106 mg/dL	N/A	125 mg/dL	Glucose levels are high due to the patient having undergone a total knee arthroplasty; acute stress response can cause cortisol to trigger the liver to release glucose and cause an elevation due to the body's fight or flight response. (Pagana, 2019)
BUN	10-20 mg/dL	N/A	19 mg/dL	
Creatinine	0.6-1.00 mg/dL	N/A	0.76 mg/dL	
Albumin	3.5-5 g/dL	N/A	N/A	
Calcium	9-10.5 mg/dL	N/A	9.1 mg/dL	
Mag	1.3-2.1 mg/dL	N/A	N/A	
Phosphate	3-4.5 mg/dL	N/A	N/A	
Bilirubin	0.3-1 mg/dL	N/A	N/A	
Alk Phos	30-120 u/L	N/A	N/A	
AST	0-35 units/L	N/A	N/A	
ALT	4-36 units/L	N/A	N/A	
Amylase	60-120 units/dL	N/A	N/A	
Lipase	0-160 units/L	N/A	N/A	
Lactic Acid	0.7-2.0 mmol/L	N/A	N/A	
Troponin	136-145 mmol/L	N/A	N/A	
CK-MB	3.5-5 mmol/L	N/A	N/A	

Total CK	98-106 mmol/L	N/A	N/A	
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Other Tests **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
INR	0.8-1.1 secs	N/A	N/A	
PT	10-13 secs	N/A	N/A	
PTT	25-35 secs	N/A	N/A	
D-Dimer	<250 bg/mL <0.4mcg/mL	N/A	N/A	
BNP	<100 pg/mL	N/A	N/A	
HDL	>45 mg/dL female >55 mg/dL male	N/A	N/A	
LDL	<130 mg/dL	N/A	N/A	
Cholesterol	<200 mg/dL	N/A	N/A	
Triglycerides	Male 40-160 mg/dL Female 35- 135 mg/dL	N/A	N/A	
Hgb A1c	Nondiabetic 4% to 5.9% Good diabetic control & <7% Fair 8% to 9% Poor >9%	N/A	N/A	
TSH	2-10 mU/L	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	
pH	5.0-9.0 units	N/A	N/A	
Specific Gravity	1.003-1.030 units	N/A	N/A	
Glucose	Negative	N/A	N/A	
Protein	Negative	N/A	N/A	
Ketones	Negative	N/A	N/A	
WBC	Negative 0-5, hpf	N/A	N/A	
RBC	Negative 0-2, hpf	N/A	N/A	
Leukoesterase	Negative	N/A	N/A	

Arterial Blood Gas **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
pH	7.35-7.45	N/A	N/A	
PaO ₂	80-100	N/A	N/A	
PaCO ₂	35-45	N/A	N/A	
HCO ₃	22-26	N/A	N/A	
SaO ₂	90-100	N/A	N/A	

Cultures **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	Negative	N/A	N/A	
Blood Culture	Negative	N/A	N/A	
Sputum Culture	Negative	N/A	N/A	
Stool Culture	Negative	N/A	N/A	

Lab Correlations Reference (1) (APA): Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2020). *Mosby's diagnostic and laboratory test reference* (15th ed.). Mosby.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

Diagnostic Test Correlation (5 points):

XR Knee 1 or 2 views right

Findings: Prosthesis is noted in the distal femur and upper tibia in normal position. Suprapatellar catheter noted.

Patient received XR Knee 1 or 2 views right due to the patient having undergone a total right knee arthroplasty (Pagana, 2019). XR knee assesses complications, ensures that post-operative surgical goals were achieved, and helps follow up to view post-operative complication (Pagana, 2019). This procedure ruled out that there was successful placement of the prosthesis and no post-operative complications are seen, therefore, post-operative surgical goals were achieved and this is why the procedure was completed.

Diagnostic Test Reference (1) (APA): Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2020). *Mosby's diagnostic and laboratory test reference* (15th ed.). Mosby.

**Current Medications (10 points, 1 point per completed med)
*10 different medications must be completed***

Home Medications (5 required) *Patient currently has only 4 medications*

Brand/Generic	Prilosec omeprazole	Citracal Calcium- Vitamin D	Lamictal lamotrigine	Motrin ibuprofen	N/ A
Dose	20mg	200 mg	175 mg	200 mg	N/ A
Frequency	Once daily	Once daily	Once daily	Once daily	N/ A
Route	Oral	Oral	Oral	Oral	N/ A
Classification	Pharmacologic : “Proton pump inhibitor” Therapeutic: “Antiulcer” (Jones & Bartlett Learning, 2023)	Pharmacologic: “Calcium salts” Therapeutic: “Antacid/Calcium replacement” (Jones & Bartlett Learning, 2023)	Pharmacologic: “Phenytriazine” Therapeutic: “Anticonvulsant” (Jones & Bartlett Learning, 2023)	Pharmacologic: “NSAID” Therapeutic: “Analgesic” (Jones & Bartlett Learning, 2023)	N/ A
Mechanism of Action	“Interferes with gastric acid secretion by inhibiting the hydrogen potassium adenosine triphosphatase enzyme system,	“Increases levels of intracellular and extracellular calcium, which is needed to maintain homeostasis,	“May stabilize neuron membranes by blocking their sodium channels and inhibiting release of excitatory	“Blocks activity of cyclooxygenase, the enzyme needed to synthesize prostaglandins, which	N/ A

	or proton pump, in gastric parietal cells.” (Jones & Bartlett Learning, 2023)	especially in the nervous and musculoskeletal systems. Also plays a role in normal cardiac and renal function, respiration, coagulation, and cell membrane and capillary permeability.” (Jones & Bartlett Learning, 2023)	neurotransmitters, such as aspartate and glutamate through these channels. By blocking the release of neurotransmitters, lamotrigine inhibits the spread of seizure activity in the brain, reduces seizure frequency, and diminishes mood swings.” (Jones & Bartlett Learning, 2023)	mediate inflammatory response and cause local pain, swelling, and vasodilation.” (Jones & Bartlett Learning, 2023)	
Reason Client Taking	GERD	Arthritis	Seizure	Moderate pain	N/A
Contraindications (2)	<ul style="list-style-type: none"> • “History of anaphylactic shock” • “Concurrent therapy with rilpivirine-containing products.” (Jones & Bartlett Learning, 2023) 	<ul style="list-style-type: none"> • “Concurrent use of calcium supplements” • “Hypercalcemia” (Jones & Bartlett Learning, 2023) 	<ul style="list-style-type: none"> • “Use caution in renal failure” • “History of angioedema” (Jones & Bartlett Learning, 2023) 	<ul style="list-style-type: none"> • “Sever heart failure” • “Severe liver failure” (Jones & Bartlett Learning, 2023) 	N/A
Side Effects/Adverse Reactions (2)	<ul style="list-style-type: none"> • “ENDO: Hypoglycemia” • “GI: Pancreatitis” (Jones & Bartlett Learning, 2023) 	<ul style="list-style-type: none"> • “CV: Hypotension” • “SKIN: Diaphoresis” (Jones & Bartlett Learning, 2023) 	<ul style="list-style-type: none"> • “CV: Conduction abnormalities” • “RESP: Apnea” (Jones & Bartlett Learning, 2023) 	<ul style="list-style-type: none"> • “CV: Heart failure” • “SKIN: Stevens-Johnson syndrome” (Jones & Bartlett Learning, 	N/A

				2023)	
Nursing Considerations (2)	<ul style="list-style-type: none"> • “Monitor patient’s urine output, because omeprazole may cause acute interstitial nephritis.” • “Monitor patient, especially if on long term therapy for hypomagnesemia.” (Jones & Bartlett Learning, 2023) 	<ul style="list-style-type: none"> • “Monitor serum calcium level in all patients, as ordered, and evaluate therapeutic response by assessing for Chvostek’s and Trousseau’s signs, which shouldn’t appear.” • “Check intravenous site regularly for infiltration because calcium causes necrosis.” (Jones & Bartlett Learning, 2023) 	<ul style="list-style-type: none"> • “Monitor patient for adverse reactions, especially suicidal thoughts, at start of therapy and with each dosage increase.” • “Monitor patient for seizure activity during lamotrigine therapy.” (Jones & Bartlett Learning, 2023) 	<ul style="list-style-type: none"> • “Monitor CBC for decreased hemoglobin and hematocrit. Drug may worsen anemia.” • “Know that the risk of heart failure increases with use of NSAIDs such as ibuprofen.” (Jones & Bartlett Learning, 2023) 	N/A
Key Nursing Assessment(s)/Lab(s) Prior to Administration	“Assess dizziness that might affect gait, balance, and other functional activities prior to administration.” (Jones & Bartlett Learning, 2023)	“Assess Vitamin D levels and assess bone pain prior to administration.” (Jones & Bartlett Learning, 2023)	“Assess weight, blood pressure, CBC, electrolytes, BUN, creatinine, and liver function prior to administration.” (Jones & Bartlett Learning, 2023)	“Assess blood pressure, pain level, emerging GI complaints prior to administration.” (Jones & Bartlett Learning, 2023)	N/A
Client Teaching Needs (2)	<ul style="list-style-type: none"> • “Advise patient to notify prescriber immediately about abdominal pain 	<ul style="list-style-type: none"> • “Remind patient to take calcium separate from other prescribed 	<ul style="list-style-type: none"> • “Advise patient to take lamotrigine exactly as prescribed and not to stop 	<ul style="list-style-type: none"> • “Advise patient to take drug with food or after meals to reduce GI 	

	<p>or diarrhea.”</p> <ul style="list-style-type: none"> • “Advise patient to notify prescriber if patient notices experience of decrease in the amount of urine voided or there is blood in his urine.” <p>(Jones & Bartlett Learning, 2021)</p>	<p>drugs.”</p> <ul style="list-style-type: none"> • “Advise storing calcium at room temperature away from heat, moisture, and light. Warn against freezing suspension or syrup.” <p>(Jones & Bartlett Learning, 2021)</p>	<p>abruptly because seizure activity may increase.”</p> <ul style="list-style-type: none"> • “Caution patient to avoid hazardous activities until drug’s CNS effects are known.” <p>(Jones & Bartlett Learning, 2021)</p>	<p>distress.”</p> <ul style="list-style-type: none"> • “Inform patient that full therapeutic effect for arthritis may take 2 weeks or longer.” <p>(Jones & Bartlett Learning, 2021)</p>	
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Hospital Medications (5 required)

Brand/ Generic	Naprosyn naproxen	Zofran-ODT ondansetron	Mylicon simethicone	Compazine prochlorperazine	Norco hydrocodone- acetaminophen
Dose	500 mg	4mg	80 mg	10 mg	325 mg
Frequency	Twice daily with meals	Every 6hrs PRN	Every 6hrs PRN	Every 6hrs PRN	Every 6hrs PRN
Route	Oral	Oral	Oral	Oral	Oral
Classification	Pharmacologic: “NSAID” Therapeutic: “Analgesic” (Jones & Bartlett Learning, 2021)	Pharmacologic : “Selective serotonin (5-HT3) receptor antagonist” Therapeutic: “Antiemetic” (Jones & Bartlett Learning, 2021)	Pharmacologic: “Antacid” Therapeutic: “Antacid/anti-flatulent” (Jones & Bartlett Learning, 2021)	Pharmacologic: “Piperazine phenothiazine” Therapeutic: “Antiemetic” (Jones & Bartlett Learning, 2021)	Pharmacologic : “Opioid” Therapeutic: “Opioid analgesic” (Jones & Bartlett Learning, 2021)

Mechanism of Action	“Blocks cyclooxygenase, the enzyme needed to synthesize prostaglandins, which mediate the inflammatory response and cause local pain, swelling, and vasodilation.” (Jones & Bartlett Learning, 2023)	“Blocks serotonin receptors centrally in the chemoreceptor trigger zone and peripherally at vagal nerve terminals in the intestine. This action reduces nausea and vomiting by preventing serotonin release in the small intestine (probable cause of chemotherapy- and radiation-induced nausea and vomiting) and blocking signals to the CNS. Ondansetron agonist may also bind to other serotonin receptors and to mu-opioid receptors.” (Jones & Bartlett Learning, 2023)	“A surfactant that decreases the surface tension of gas bubbles in the gastrointestinal tract, more easily allowing gas to exit the body.” (Jones & Bartlett Learning, 2023)	“Alleviates psychotic symptoms by blocking dopamine receptors, depressing release of selected hormones, and producing alpha-adrenergic blocking effect in the brain.” (Jones & Bartlett Learning, 2023)	“Binds to and activates opioid receptors at sites in the periaqueductal and periventricular gray matter, the ventromedial medulla, and the spinal cord to produce pain relief.” (Jones & Bartlett Learning, 2023)
Reason Client Taking	Arthritis	Nausea	Flatulence, cramping	Nausea/Anxiety	Moderate pain or more severe pain if patient requests
Contraindications (2)	<ul style="list-style-type: none"> • “History of asthma” • “Allergic reactions induced by aspirin or 	<ul style="list-style-type: none"> • “Concomitant use of apomorphine” • “Concomitant use of tramadol” 	<ul style="list-style-type: none"> • “GI obstruction” • “Phenylketonuria” (Jones & Bartlett 	<ul style="list-style-type: none"> • “Age less than 2 years” • “Severe CNS depression” (Jones & Bartlett Learning, 2021) 	<ul style="list-style-type: none"> • “Children under the age of 18” • “Acute or severe bronchial asthma”

	other NSAIDs” (Jones & Bartlett Learning, 2021)	(Jones & Bartlett Learning, 2021)	Learning, 2021)		(Jones & Bartlett Learning, 2021)
Side Effects/Adverse Reactions (2)	<ul style="list-style-type: none"> • “GI: GI bleeding” • “EENT: Papilledema” (Jones & Bartlett Learning, 2021) 	<ul style="list-style-type: none"> • “EENT: stridor” • “RESP: bronchospasm” (Jones & Bartlett Learning, 2021) 	<ul style="list-style-type: none"> • “CNS: Headache” • “GI: Fecal impaction” (Jones & Bartlett Learning, 2021) 	<ul style="list-style-type: none"> • “CV: Hypotension” • “GU: Dysuria” (Jones & Bartlett Learning, 2021) 	<ul style="list-style-type: none"> • “ENDO: Adrenal insufficiency” • “Resp: Respiratory depression” (Jones & Bartlett Learning, 2021)
Nursing Considerations (2)	<ul style="list-style-type: none"> • “Be aware that naproxen may decrease benefit of aspirin when taken for a heart attack or stroke.” • “Rehydrate a dehydrated patient before giving drug. If patient has renal disease, monitor renal function closely during therapy.” (Jones & Bartlett Learning, 2021) 	<ul style="list-style-type: none"> • “Monitor patient closely for serotonin syndrome, which may include agitation, chills, confusion, diaphoresis, diarrhea, fever, hyperactive reflexes, poor coordination, restlessness, shaking, talking, or acting with uncontrolled excitement, tremor, and twitching.” • “Be aware that oral disintegrating tablets may contain aspartame, which is metabolized to phenylalanine and must be 	<ul style="list-style-type: none"> • “Assess patient for abdominal pain, distention, and bowel sounds prior to and periodically throughout course of therapy.” • “Explain the importance of diet and exercise in the prevention of gas.” (Jones & Bartlett Learning, 2021) 	<ul style="list-style-type: none"> • “Be aware that prochlorperazine shouldn’t be used to treat dementia-related psychosis in the elderly because of increased mortality risk.” • “Be alert to signs of high core temperature: Red, dry, hot skin; full bounding pulse; dilated pupils; dyspnea; confusion; temperature over 40.6° C (105° F); elevated BP.” (Jones & Bartlett Learning, 2021) 	<ul style="list-style-type: none"> • “Be aware that hydrocodone increases the risk of abuse, addiction, and misuse.” • “Monitor patients with a seizure history or disorder because hydrocodone may cause or worsen seizures.” (Jones & Bartlett Learning, 2021)

		avoided in patients with phenylketonuria.” (Jones & Bartlett Learning, 2021)			
Key Nursing Assessment(s) / Lab(s) Prior to Administration	“Assess for allergy to NSAIDs or salicylate prior to administration.” (Jones & Bartlett Learning, 2021)	“Assess dizziness and drowsiness that might affect gait, balance, and other functional activities prior to administration.” (Jones & Bartlett Learning, 2021)	“Assess for heartburn and indigestion as well as location, duration, character, and precipitating factors of gastric pain prior to administration.” (Jones & Bartlett Learning, 2021)	<ul style="list-style-type: none"> “Lab tests: Periodic CBC with differential in long-term therapy.” (Jones & Bartlett, 2021) 	“Assess respiratory rate and pulse oximetry prior to administration.” (Jones & Bartlett Learning, 2021)
Client Teaching Needs (2)	<ul style="list-style-type: none"> “Advise patient to take drug with food to reduce GI distress.” “Urge patient to keep scheduled appointments with prescriber to monitor progress.” (Jones & Bartlett Learning, 2021) 	<ul style="list-style-type: none"> “Reassure patient with transient blindness that it will resolve within a few minutes to 48 hours.” “Advise patient to seek immediate medical attention if patient experiences persistent, severe, unusual, or worsening symptoms.” (Jones & Bartlett, 2021) 	<ul style="list-style-type: none"> “Take this medication after meals and at bedtime for best results.” “Take simethicone exactly as directed. Do not take more or less of it or take it more often than prescribed by your doctor.” (Jones & Bartlett Learning, 2021) 	<ul style="list-style-type: none"> Avoid hazardous activities such as driving a car until response to drug is known because drug may impair mental and physical abilities, especially during first few days of therapy.” “Be aware that drug may color urine reddish brown. It 	<ul style="list-style-type: none"> “Instruct patients to avoid drinking alcohol because of the increased risk of overdose, respiratory depression, and death.” “Instruct patient to rise slowly from a lying or sitting position and to lie or sit down if experiencing light-headedness.” (Jones & Bartlett Learning, 2021)

				also may cause the sun-exposed skin to turn gray blue.” (Jones & Bartlett, 2021)	
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Medications Reference (1) (APA): Jones & Bartlett Learning. (2021). *2021 Nurse's drug handbook* (20th ed.). Jones & Bartlett Learning.

Assessment

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

GENERAL: Alertness: Orientation: Distress: Overall appearance:	ALERTNESS & ORIENTATION: The patient is alert and oriented to person, place, time, and situation. APPEARANCE: The patient is well-groomed, wearing an appropriate hospital gown. DISTRESS: The patient does not appear to be in no acute distress
INTEGUMENTARY: Skin color: Character: Temperature:	SKIN COLOR: Skin is usual for ethnicity, dark brown color. CHARACTER: Skin is dry and intact, with no rashes, lesions, or bruising except for in wound.

<p>Turgor: Rashes: Bruises: Wounds: Braden Score: Drains present: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Type:</p>	<p>TEMPERATURE: Skin is warm and dry upon palpation. TURGOR: Skin has normal elasticity. WOUNDS: The patient has bruising in wound area. Sutures on right lower extremity from knee arthroplasty. CAPILLARY REFILL: Capillary refills on the fingers & toes are less than 3 seconds bilaterally. BRADEN SCORE: 20 DRAIN: Jackson-Pratt. Sanguineous drainage. 30mL output from drain, which is adequate for post-op.</p>
<p>HEENT: Head/Neck: Ears: Eyes: Nose: Teeth:</p>	<p>HEAD: Head is normocephalic and atraumatic. NECK: Neck is symmetrical. Bilateral carotid pulses are palpable and 2+. EYES: Bilateral sclera white, bilateral cornea clear, bilateral conjunctiva pink, no visible drainage from eyes. Bilateral lids are moist and pink without lesions or discharge. PERRLA bilaterally. EOMs intact bilaterally. EARS: No drainage or ear wax, hearing intact, bilateral auricles, no visible or palpable deformities, lumps, or lesions. NOSE: Nose has no drainage, lumps, rashes, lesions, or deformities. Septum is midline. TEETH: Oral mucosa pink and moist with good dentition.</p>
<p>CARDIOVASCULAR: Heart sounds: S1, S2, S3, S4, murmur etc. Cardiac rhythm (if applicable): Peripheral Pulses: 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>HEART SOUNDS: S1 and S2 heard, no murmur or extra heart sounds. Regular rate and rhythm. PERIPHERAL PULSES: Peripheral pulses 2+, bilaterally, and symmetrical. CAPILLARY REFILL: Capillary refill less than 3 seconds on fingers and toes. EDEMA: No edema noted.</p>
<p>RESPIRATORY: Accessory muscle use: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Breath Sounds: Location, character</p>	<p>RESPIRATIONS: Normal rate and pattern of respirations. Symmetrical and non-labored. BREATH SOUNDS: Breath sounds, clear throughout. No wheezes or crackles noted.</p>
<p>GASTROINTESTINAL: Diet at home: Current Diet</p>	<p>DIET AT HOME: Regular diet CURRENT DIET: Regular diet HEIGHT: 5'4"</p>

<p>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>WEIGHT: 217lbs AUCULTATION BOWEL SOUNDS: Bowel sounds within defined limits, except for hypoactive in LUQ. No organomegaly found. No rashes, lesions, lumps, or deformities. Last BM: Last bowel movement was 5/31/2023, formed and brown. PALPATION: Abdomen is soft, no tenderness, and no masses. INSPECTION: No distention. No incisions. No drains. No wounds.</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>COLOR: Yellow CHARACTERISTIC: Clear QUANTITY: Within defined limits, adequate output. INSPECTION: Genitals are of standard appearance</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"/> Fall Score: Activity/Mobility Status: Independent (up ad lib) <input type="checkbox"/> Needs assistance with equipment <input type="checkbox"/> Needs support to stand and walk <input type="checkbox"/></p>	<p>NEUROVASCULAR: Within defined limits ROM: All extremities have full range of motion, except for right lower extremity has limited ROM due to being post-op of right total knee arthroplasty. SUPPORTIVE DEVICES: Patient does use a walker with a one assist. STRENGTH: Hand grips, pedal pushes are limited in right lower due to being post-op, and pulls demonstrate normal and equal strength. FALL SCORE: 74 ACTIVITY/MOBILITY STATUS: Within defined limits post-op and age. Patient does use a walker with a one assist.</p>
<p>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 type="checkbox"/> N <input checked="" type="checkbox"/> if no -</p>	<p>STRENGTH: Strength is equal, except for lower right extremity is limited due to being post-op. ORIENTATION: The patient is alert and oriented to person, place, time, and situation.</p>

Legs <input checked="" type="checkbox"/> Arms <input type="checkbox"/> Both <input type="checkbox"/> Orientation: Mental Status: Speech: Sensory: LOC:	COGNITION/MENTAL: The patient's cognition status is adequate. SPEECH: The patient's speech is adequate SENSORY: The patient has adequate sensory, was tested on the legs and arms. LOC: The client is alert and awake, answers questions that are asked appropriately.
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):	COPING METHODS: The patient stated, "I confide in my husband and tell him things that are on my mind or bothering me, and we talk it out." DEVELOPMENTAL LEVEL: Generativity vs. Stagnation. The patient goes to church with her husband and likes to be involved in family functions. RELIGION: The patient identifies as a Christian and says that she enjoys going to church with her husband. PERSONAL/FAMILY DATA: The patient lives with her husband and sees her family every other weekend usually. She has a great family support system, and her home environment is efficient for her health.

Vital Signs, 2 sets (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0730	72	121/51	18	97.0	96 (on room air)
1100	78	126/64	18	97.4	96 (on room air)

Vital Sign Trends:

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0730	10/10	Right lower extremities	Severe	Constant, throbbing, sharp	Added a BID NSAID
1415	8/10	Right lower extremities	Severe	Constant, throbbing, sharp	Norco was given

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: Location of IV: Date on IV: Patency of IV: Signs of erythema, drainage, etc.: IV dressing assessment:	22 gauge Right antebachial 06/02/2023 Not used during shift- cannot assess patency. No signs of erythema, drainage, etc. Clean, dry, intact- tegaderm dressing. Saline locked.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
720 mL	3 urinary occurrences

Nursing Care**Summary of Care (2 points)**

Overview of care: This student RN arrived at the medical surgical unit on 4E around 0830. Student RN introduced herself to RN Jasmine, then introduced herself to the patient – M.J. The student RN investigated the patient’s charts and then proceeded to help the patient sit on the side of the bed, complete a head-to-toe assessment on the patient. The student RN and RN

Jasmine went to the patients' room to remove the Jackson-Pratt drain from the patients' surgical site.

Procedures/testing done: The patient had a preoperative knee X-ray after right total knee arthroplasty.

Complaints/Issues: The patient had no complaints/issues throughout the student RNs' shift.

Vital signs (stable/unstable): The patient's vitals were stable throughout the student RNs' shift.

Tolerating diet, activity, etc.: The patient was lacking an appetite, but was able to keep food down and stomach tolerated well. The patient tolerated activity adequately post-op.

Physician notifications: Physician was notified to put in an order for a BID NSAID due to the patients' pain being intolerable after femoral block wore off.

Future plans for client: The student RN talked to the patient and discussed that the patient was going to discharge and return to home where she will engage in a 2 week in home physical therapy and then go to an outpatient physical therapy to assist with full recovery. The patient knows that

Discharge Planning (2 points)

Discharge location: The patient will be discharged and returning to home alone.

Home health needs (if applicable): The patient will not benefit from home health care, as patient has immediate support within the home, which is her husband.

Equipment needs (if applicable): The patient would benefit from a cane or walker until gait and balance is back to normal.

Follow up plan: The patient should visit with her primary physician to follow up as well as the surgeon should be notified of recovery status due to patient having right total knee arthroplasty that was just recently completed.

Education needs: The patient needs educated on fall risks, such as getting rid of throw rugs in the home, making sure areas that are being used in the home are well lit so patient is able to see sufficiently, and installing grab bars in the shower or around toilet to assist patient in standing up until fully healed. The patient also needs education on pain medication, so that medication is taken when the pain is intolerable for the patient. The patient should be taking enough protein and iron in her diet to help aid in her recovery and health.

Nursing Diagnosis (15 points)

Must be NANDA approved nursing diagnosis and listed in order of priority

Nursing Diagnosis <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 	Rationale <ul style="list-style-type: none"> • Explain why the nursing diagnosis was chosen 	Interventions (2 per dx)	Outcome Goal (1 per dx)	Evaluation <ul style="list-style-type: none"> • How did the client/family respond to the nurse’s actions? • Client response, status of goals and outcomes, modifications to plan.
1. Risk for infection related to the implantation of a foreign body as evidence by the patient undergoing right total knee arthroplasty. (Phelps, 2020)	This nursing diagnosis was chosen due to the patient having a knee implant inserted, which causes her to be susceptible to infection.	1. Educate the patient on symptoms of infection to look out for and contact provider if she has suspicion of infection. (Phelps, 2020) 2. Emphasize	1. The patient will remain free from symptoms of infection and have a timely wound healing. (Phelps, 2020)	The student RN spoke to the patient and talked about the signs and symptoms that can be seen if an infection were to occur and to make sure to follow up with her primary

		to the patient about the importance of follow-up visit with primary physician. (Phelps, 2020)		physician. The patient is going to schedule a follow up with her primary physician and notify the provider if infection is suspected.
2. Risk for delayed surgical recovery related to painkiller medications as evidence by the patient being prescribed hydrocodone-acetaminophen for pain relief. (Phelps, 2020)	This nursing diagnosis was chosen due to the patient being prescribed hydrocodone-acetaminophen for pain relief. Pain medication can aid in a slow healing process.	<p>1. Educate the patient on the importance of nutrition; protein, carbohydrates, fats, vitamins, and minerals as well as adequate water intake aid in wound healing. (Phelps, 2020)</p> <p>2. Educate the patient on how to properly assess the wound by examining color, depth, and presence of drainage to determine efficient healing. (Phelps, 2020)</p>	1. The patient will verbalize an understanding and participate in wound care. (Phelps, 2020)	The student RN spoke with the patient and educated the patient on the different foods that can assist with proper healing as well as demonstrating to the patient how to assess her wound for color, depth, and drainage. The patient demonstrated back to the student RN how to assess her wound and is considering meal prepping to reduce eating fast food.
3. Risk for activity intolerance related to joint inflammation and pain as	This nursing diagnosis was chosen due to the patient reporting a 10 out of 10 pain	1. Encourage the patient to take pain medication prior to engaging in	1. The patient will demonstrate an increase in activity levels. (Phelps, 2020)	The student RN spoke with the patient and encouraged the patient to take pain medication

evidence by a pain score of 10 out of 10 rated by the patient. (Phelps, 2020)	score. If pain were to continue at this severity, the patient could deter from gaining her activity tolerance back.	physical activity. (Phelps, 2020) 2. Encourage the patient to alternate periods of physical activity with 60-90 minutes of undisturbed rest. (Phelps, 2020)		before physical activity and take scheduled rest breaks during physical activity. The patient demonstrated ambulating from the bed to the chair after receiving pain medication and acknowledged that the pain wasn't so severe.
4. Risk for falls related to lower limb prosthesis as evidence by the patient undergoing right total knee arthroplasty. (Phelps, 2020)	This nursing diagnosis was chosen due to the patient having a prosthetic knee inserted and having to re-iterate ambulating post-op.	1. Encourage the patient to have assistance when ambulating. (Phelps, 2020) 2. Educate the patient on the importance of keeping room/home free of clutter. (Phelps, 2020)	1. The patient will demonstrate an understanding of the risk factors for falls. (Phelps, 2020)	The student RN spoke with the patient and encouraged the patient to use her assistive device (walker) when ambulating with a one person assist. Student RN also educated the patient on ways to keep her home free of clutter to reduce the risk of falls. The patient is considering installing grab bars in the shower and getting rid of throw rugs in her home.

Other References (APA): Phelps, L. L. (2020). *Sparks & Taylor's Nursing Diagnosis Reference Manual*. Wolters Kluwer.

Concept Map (20 Points):

Subjective Data

Height: 5'4"
Weight: 217lbs
Temp: 97.0
Pulse: 72
BP: 121/51
Resp rate: 18
Oxygen: 96 (on room air)

Patient rated pain a 10 out of 10 and stated that it is constant, throbbing, sharp pain in right lower extremity.
Patient rated pain an 8 out of 10 and stated that it is constant, throbbing, sharp pain in right lower extremity.

Labs:
Hct- 34.0%
Hemoglobin- 11.4
Lymphocytes - 13.7%
Neutrophils- 44.1
Na- 131 mEq/L
K- 3.4 mEq/L
FALL SCORE: 74
Glucose- 125 mg/dl
BRADEN SCORE- 20

Objective Data

Patient has limited range of motion in right lower extremity to knee arthroplasty.
Patient has hypoactive bowel sounds in left upper quadrant.
The patient has a wound(sutures) from recent knee arthroplasty on the right lower extremity.
Patient does use a 1 assist with a walker.
Jackson-Pratt. Sanguineous drainage. 30mL output from drain, which is adequate for post-op.

Nursing Diagnosis/Outcomes

1. Educate the patient on symptoms of infection to look out for and contact provider if she has suspicion of infection. (Phelps, 2020)
2. Emphasize to the patient about the importance of follow-up visit with primary physician. (Phelps, 2020)

Risk for infection related to the implantation of a foreign body as evidence by the patient undergoing right total knee arthroplasty. (Phelps, 2020)
The patient will remain free from symptoms of infection and have a timely wound healing. (Phelps, 2020)

Initials: M.J.

67-year-old female

Retired nurse

Married

No known allergies

Full Code

Client Information

- The patient will demonstrate an understanding of the risk factors for falls. (Phelps, 2020)

1. Educate the patient on the importance of nutrition; protein, carbohydrates, fats, vitamins, and minerals as well as adequate water intake aid in wound healing. (Phelps, 2020)
2. Educate the patient on how to properly assess the wound by examining color, depth, and presence of drainage to determine efficient healing. (Phelps, 2020)

Risk for activity intolerance related to joint inflammation and pain as evidence by the patient undergoing right total knee arthroplasty. (Phelps, 2020)
The patient will verbalize an understanding and participate in wound care. (Phelps, 2020)

Nursing Interventions

1. Encourage the patient to take pain medication prior to engaging in physical activity. (Phelps, 2020)
 2. Encourage the patient to alternate periods of physical activity with 60-90 minutes of undisturbed rest. (Phelps, 2020)
1. Encourage the patient to have assistance when ambulating. (Phelps, 2020)
 2. Educate the patient on the importance of keeping room/home free of clutter. (Phelps, 2020)

