N301 Care Plan

Lakeview College of Nursing

Sydney Morgan

Demographics (5 points)

Date of Admission	Patient Initials	Age	Gender
2/12/2019	RL	63	Female
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
Caucasian	Unemployed - Disability	Single	Morphine, PCN, sulfa drugs
Code Status	**Height**	**Weight**	
Full Code	162.5 cm (5'4")	112.9 kg (248.4 lb)	

Medical History (5 Points)

Past Medical History: Bladder retention, Cauda equina syndrome, Type 2 diabetes mellitus, Hx of PE, HTN, degenerative joint disease, carpal tunnel, asthma

Past Surgical History: Carpal tunnel release (2016), Lumbar (2015), Right total knee arthroplasty (2010), Spinal fusion (2000), Hysterectomy (1992)

Social History (tobacco/alcohol/drugs, pertinent social factors): Patient is currently unemployed, she receives disability pay. She lives alone. Sisters are present at bedside, patient has a daughter not present. Patient stated her daughter would be the one to help her at home after discharge. Patient denied any tobacco history. Patient stated occasional alcohol use, 1-2 drinks/week. Patient denied any history of illicit drug use. Patient is at an appropriate developmental level for stated age. Patient uses glasses and a walker**.**

Admission Assessment

Chief Complaint (2 points): "Left knee pain and stiffness"

History of present Illness (10 points): Patient presented with limited ROM and chronic left knee pain. Patient doesn't report any sudden onset of pain, has been present for some time. Patient reports that the pain was constant and achy. Some NSAIDs helped relieve the pain but not for extended periods. Patient was previously diagnosed with degenerative joint disease. Upon physical examination, Dr. Mendella noted "presence of mild pain and crepitus during both active and passive ROM in the left knee" in his orthopedic history and physical. Dr. Mendella scheduled a total knee arthroplasty January 29, 2019. Surgery was performed February 12, 2019**.**

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Degenerative joint disease

Secondary Diagnosis (if applicable): Right total knee arthroplasty

Pathophysiology of the Disease, APA format (15 points): Degenerative joint disease, also known as osteoarthritis, a common musculoskeletal disease in older adults. Degenerative joint disease is a chronic, progressive disease begins with a decrease in articular cartilage along with an increase of the subchondral bone, resulting in bony growths on the joint. Patients with this progressive disease experience pain, loss of function, and malformation [CITATION Pam16 \p 504 \l 1033]. Degenerative joint disease is often a debilitating disease, and can cause patients to become unable to perform or have difficulty with activities of daily living.

Degenerative joint disease can be deemed idiopathic or secondary. Idiopathic degenerative joint disease presents in patients with no history of joint injury or other disease processes, aging can play a role but studies have shown the presence of a recessive gene can also play a role in the degeneration of joints, secondary degenerative joint disease presents from a specific cause, such as injury or overload on joints [CITATION Pam16 \p 504 \l 1033].

On physical examination and assessment, RL had a previous history of degenerative joint disease in her right knee and hip. She had a total knee arthroplasty done on the right knee previously. She originally presented with pain and limited ROM in the left knee. Upon Dr. Mendella's pre-operative physical examination he reported "pain and crepitus with both active and passive ROM". RL's progression of the disease had not caused any severe deformities, but was affecting ADLs and quality of life. Left total knee arthroplasty was scheduled. Total knee arthroplasty is the surgical removal of the knee joint and it is replaced with an endoprosthesis[CITATION ATI16 \l 1033].

References:

ATI Nursing Education. (2016). *Content Mastery Series: RN Adult Medical Surgical Nursing Edition 10.0.* Assessment Technologies Institute, LLC.

Swearingen, P. L. (2016). *All-in-One Nursing Care Planning Resource 4th Edition.* St. Louis Missouri: Elsevier.

Laboratory Data (15 points)

CBC: Highlight All Abnormal Labs, Explanations must contain in-text citations in APA format.

**patient did not have any pre-operative labs upon admission

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	**4.2 – 6.1**	**N/A**	**3.37**	**Within normal limits**
Hgb	**12 - 18**	**N/A**	**9.8**	**Hgb values are typically lower in post-operative patients. This is due to blood lost during the operation, orthopedic surgeries often cause enough blood loss to cause a change**

				in Hgb levels, particularly in older patients. Patient is one day post-operative and is 63 years of age. [CITATION Zho15 \l 1033]
Hct	**37 - 52**	**N/A**	**28.7**	**Hct values are typically lower in post-operative patients. This is due to blood lost during the operation, orthopedic surgeries often cause enough blood loss to cause a change in Hct levels, particularly in older patients. Patient is one day post-operative and is 63 years old.** [CITATION Zho15 \l 1033]
Platelets	**150,000 – 400, 000**	**N/A**	**264,000**	**Within normal limits**
WBC	**5,000 – 10,000**	**N/A**	**11,500**	**Leukocytosis is a common bodily response to an invasive surgery, such as TKA and THA. Patient is one day post-operative TKA.** [CITATION Dei11 \l 1033]
Neutrophils	**45 – 75%**	**N/A**	**N/A**	
Lymphocytes	**20 – 40%**	**N/A**	**N/A**	
Monocytes	**4 – 6%**	**N/A**	**N/A**	
Eosinophils	**10%**	**N/A**	**N/A**	
Bands	**0**	**N/A**	**N/A**	

Chemistry: Highlight Abnormal

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na+	**135 – 145**	**N/A**	**143**	**Within normal limits**
K+	**3.5 – 5.0**	**N/A**	**3.9**	**Within normal limits**
Cl-	**98 – 106**	**N/A**	**107**	**Elevated chloride can be related to dehydration. Patient was NPO prior to surgery and her urine was a darker yellow, indicating dehydration.** [CITATION Jan17 \ p 2375 \l 1033]
CO2	**20 – 29**	**N/A**	**28**	**Within normal limits**
Glucose	**70 - 100**	**N/A**	**135**	**Elevated glucose can be seen in patients with diabetes mellitus. Patient has a history of type 2 diabetes mellitus.** [CITATION ATI16 \p 527 \l 1033]
BUN	**2.5 – 7.14**	**N/A**	**11**	**Elevated BUN can be related to dehydration. Patient was NPO prior to surgery and her urine was a darker yellow, indicating dehydration.** [CITATION Jan17 \ p 2375 \l 1033]
Creatinine	**0.8 – 1.2**	**N/A**	**0.69**	**Within normal limits**

Albumin	**35 – 55**	**N/A**	**N/A**	
Calcium	**8.5 – 10.2**	**N/A**	**N/A**	
Mag	**1.3 – 2.1**	**N/A**	**N/A**	
Phosphate	**3.0 – 4.5**	**N/A**	**N/A**	
Bilirubin	**0.3 – 1**	**N/A**	**N/A**	
Alk Phos	**30 – 120**	**N/A**	**N/A**	
AST	**10 – 40**	**N/A**	**N/A**	
ALT	**44 – 147**	**N/A**	**N/A**	
Amylase	**30 – 220**	**N/A**	**N/A**	
Lipase	**0 – 160**	**N/A**	**N/A**	
Cholesterol	**Less than 200**	**N/A**	**N/A**	
Triglycerides	**Less than 150**	**N/A**	**NA**	
Lactic Acid	**0.5 – 1**	**N/A**	**N/A**	

Other Tests Highlight Abnormal

Lab Test	**Normal Range**	**Value on Admission**	**Today's Value**	**Reason For Abnormal**
INR	**0.8 – 1.1 (2 - 3 on warfarin)**	**N/A**	**N/A**	
PT	**11 – 12.5**	**N/A**	**N/A**	

PTT	**30 - 40**	**N/A**	**N/A**	
D-Dimer	**Less than 0.4**	**N/A**	**N/A**	
BNP	**Less than 100**	**N/A**	**N/A**	

Urinalysis Highlight Abnormal

Lab Test	Normal Range	Value on Admission	Today's Value	Reason For Abnormal
Color & Clarity	**Clear and yellow**	**N/A**	**dark yellow**	**Dark yellow urine can be an indication of dehydration. Patient was NPO prior to surgery and urine appeared dark yellow.** [CITATION Jan17 \p 2375 \l 1033]
pH	**6.0**	**N/A**	**6.0**	**Within normal limits**
Specific Gravity	**1.005 – 1.035**	**N/A**	**1.016**	**Within normal limits**
Glucose	**0**	**N/A**	**Negative**	**Within normal limits**
Protein	**0**	**N/A**	**Negative**	**Within normal limits**
Ketones	**0**	**N/A**	**Negative**	**Within normal limits**
WBC	**Less than 5**	**N/A**	**Negative**	**Within normal limits**
RBC	**0-3**	**N/A**	**Negative**	**Within normal limits**
Leukoesterase	**0**	**N/A**	**Negative**	**Within normal limits**

Cultures

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	**0**	**N/A**	**N/A**	
Blood Culture	**0**	**N/A**	**N/A**	
Sputum Culture	**0**	**N/A**	**N/A**	

Lab Correlations Reference (APA): ATI Nursing Education. (2016). *Content Mastery Series: RN Adult Medical Surgical Nursing Edition 10.0.* Assessment Technologies Institute, LLC.

Deirmengian GK1, Z. B. (2011). Leukocytosis is common after total hip and knee arthroplasty. *PubMed*.

Janice L. Hinkle PhD, R. C. (2017). *Brunner & Suddarth's Textbook of Medical-Surgical Nursing.* New York, New York: Wolters Kluwer.

Zhong-Yi Chen, H.-Z. W.-B. (2015). Postoperative Changes in Hemoglobin and Hematocrit in Patients Undergoing Primary Total Hip and Knee Arthroplasty. *Chinese Medical Journal*, 197.

Other Diagnostic Tests (EKG, Echocardiogram, Xrays, CT scan, etc) (5 points): Patient's physical examination and past history of degenerative joint disease, MRI scans were ordered to visualize the full joint degeneration. Standing MRI scan from all angles were used – MRI indicated a severe enough progression, along with physical examination findings to warrant total knee arthroplasty surgery. MRIs are more sensitive than X-ray examinations in indicating the progression of degenerative joint disease [CITATION Pam16 \p 505 \l 1033]

Diagnostic Test Correlation, APA Format & References (5 points):

Swearingen, P. L. (2016). *All-in-One Nursing Care Planning Resource 4th Edition.* St. Louis Missouri: Elsevier.

Current Medications (10 points, 1 per completed med))

Home Medications (5 required)

Brand/Generic	Apo-Cephalex (cephalexin) [CITATION Jon18 \p 204-205 \l 1033]	Norco (hydrocodone acetaminophen) [CITATION Jon18 \p 526-527 \l 1033]	Aspirin (acetylsalicylic acid) [CITATION Jon18 \p 90-91 \l 1033]	ProAir (albuterol) [CITATION Jon18 \p 29-30 \l 1033]	Hydro-chlorothiazide [CITATION Jon18 \p 524-525 \l 1033]
Dose	500 mg	5mg – 325 mg per tab x 2	81 mg	180 mcg (2 puffs)	25 mg
Route	PO	PO	PO	inhalant	PO
Classification	1st generation cephalosporin antibiotic	Opioid analgesic/NSAID	Salicylate antiplatelet	Adrenergic bronchodilator	Benzothiadiazide diuretic
Action	Interferes with bacterial cell wall synthesis by	Binds to and activates opioid receptors at sites in in the	Blocks the enzyme needed for prostaglandi	Attaches to beta2 receptors on bronchial cells	Promotes movement of sodium, chloride, and

	preventing the final step in connecting the peptidoglycan.	brain and spinal cord to relieve pain	n synthesis	leading to bronchodilation	water from blood into nephrons
Reason Client Taking	Prophylactic post-operative infection control	Post-operative pain control	PE prevention	Asthma related symptoms	Diuresis of excess fluids
Contraindications (2)	Renal impairment, GI disease	Bronchial asthma or hypercarbia, use within 14 days of MAOI therapy	Bleeding disorders, peptic ulcer disease	Hypersensitivity Glaucoma patients	Anuria, renal failure
Side Effects/Adverse Reactions (2)	Fever/chills, headache, hepatic failure	Nausea/ vomiting, lightheadedness, drowsiness	Tinnitus, GI bleeding, Reye's syndrome	Anxiety, hypokalemia	Hypokalemia, hyperglycemia
Nursing Considerations (2)	Use cautiously in patients allergic to	Use caution when administering to patients with	Do not crush time-release aspirin, monitor	Monitor respiratory function, auscultate	Monitor potassium levels, monitor for decreased

	PCN, monitor BUN/creatinine to detect nephrotoxicity	respiratory compromise, frequently assess vitals signs and look for signs of respiratory depression	patient for tinnitus	lung sounds, monitor potassium	visual acuity or ocular pain, monitor blood glucose
Client Teaching needs (2)	Advise patient to take all prescribed medication as directed, tell the patient to report watery, bloody stool to provider	Educate patient on the importance of taking the medication as directed, patients should be taken whole, never crushed, chewed, or dissolved	Advise patient not to take ibuprofen while taking low-dose aspirin, educate patient on signs of bleeding	Educate patient on correct technique to use inhaler, advise patient to wash mouthpiece once per week, notify provider if symptoms don't resolve	Advise patient to take in the morning to void nocturia, instruct patient to weigh themselves daily and keep a record

Hospital Medications (5 required)

Brand/Generic	Miralax (polyethylene glycol) [CITATION Jon18 \p 1233 \l 1033]	Xarelto (rivaroxaban) [CITATION Jon18 \p 979-980 \l 1033]	Kefzol (cefazolin) [CITATION Jon18 \p 175-176 \l 1033]	Novolog (insulin aspart) [CITATION Jon18 \p 1205 \l 1033]	Toradol (ketorolac tromethamine) [CITATION Jon18 \p 595-595 \l 1033]
Dose	17 g	10 mg	1000 mg	Sliding scale (none needed during my shift)	15 mg
Route	PO	PO	PO	SubQ	IV push
Classification	Osmotic laxative	Factor Xa inhibitor antithrombolytic	1st generation cephalosporin antibiotic	Recombinant human insulin analog	NSAID
Action	Retains water in the stool creating softer and more frequent stools	Blocks factor Xa which plays a role in clotting; impairs blood	Interferes with bacterial cell wall synthesis by preventing	Short acting	Blocks an enzyme needed in the synthesis of

	without effect glucose and electrolytes	clotting	the final step in connecting the peptidoglycan		prostaglandins; reducing the inflammatory response
Reason Client Taking	Constipation is a side effect of patient's pain meds	Prevention of PE/DVT post-operative	Prophylactic post-operative infection control	Type 2 diabetes mellitus control	Post-operative pain control
Contraindications (2)	Hypersensitivity, bowel obstruction	Bleeding disorders, renal/ hepatic impairment	Renal impairment, GI disease	Hypoglycemic episodes, hypersensitivity	Renal impairment, history of GI bleeding
Side Effects/Adverse Reactions (2)	Diarrhea Hypokalemia	Hemorrhage, thrombocytopenia, extremity pain	Chills/fever, headache, elevated liver enzymes, arthralgia	Hypoglycemia, hypokalemia, injection site reactions/irritation	Hemorrhage, edema/fluid retention, renal failure
Nursing Considerations (2)	Monitor potassium levels, Monitor I&Os	Do not give to patients with hepatic/renal compromises, monitor vital signs and	Reconstitute drug with water for injection and inject slowly over 3-5 min,	Monitor blood glucose regularly, monitor serum potassium levels, inspect	Avoid administering to patients with recent MI, inject slowly over

		pertinent labs, monitor for signs of bleeding	monitor BUN/creatinine and liver enzymes	injection sites frequently	at least 15 seconds, dilute to decrease burning
Client Teaching needs (2)	Instruct patient to drink adequate fluids, educate on the signs of dehydration	Educate the patients on signs of bleeding and when to notify the provider, educate patient to use an electric razor and soft toothbrush	Explain IM injection procedure to client, tell patient to report watery, bloody stools	Educate patient on the signs of hypoglycemia and when to contact a provider, educate patient on subcutaneous injection procedure	Tell patient may feel a slight burning sensation as the medication is administered, educate patient on signs of bleeding and when to notify the provider

Lab Reference (APA Format): ATI Nursing Education. (2016). *Content Mastery Series: RN Adult Medical Surgical Nursing Edition 10.0.* Assessment Technologies Institute, LLC

Assessment

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0805	**86**	**102/57**	**18**	**37.1**	**94%**
0920	**95**	**116/54**	**18**	**36.8**	**94%**

Physical Exam (18 points)

NEUROLOGICAL (2 points): **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☐ N ☒ if no -** **Legs ☒ Arms ☐ Both ☐** **Orientation, Mental Status, Speech, Sensory, LOC: AOx4**	Patient awake and in chair, fully alert. She is A&Ox4. Patient seemed to be in good spirits and motivated to regain full mobility. Patient stated that her pain was minimal during the first part of my shift. Patient appears stated age and developmental level. Patient spoke English well. Patient MAEW, with the exception of the left knee, but was doing very well for one day TKA post-operative. Patient showed some expected weakness left leg, due to surgery and some pain.

MUSCULOSKELETAL (2 points): **Neurovascular status, ROM, Supportive devices/strength** **ADL Assistance Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Activity/Mobility Status:** **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☒ **Needs support to stand and walk** ☒	Fall risk – 45 Patient shows full ROM in all joints, with the exception of the left knee. With the CPM, patient was able to get 60 degrees flexion, -5 degrees extension in the left knee. Patient walked twice during my shift, approximately 120 ft each time. Patient is up with assistance x1. Patient uses walker. Patient was using the room bathroom, with assistance to and from. Patient also wears glasses.
CARDIOVASCULAR (2 points): **Heart sounds:** **S1, S2, S3, S4, murmur etc. S1, S2** **Cardiac rhythm (if applicable)** **Peripheral Pulses: Radial, pedal** **Capillary refill: _< 3 seconds** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema_____**	Patient is not required to be on telemetry. Heart sounds were auscultated at first assessment, S1 and S2 heart sounds were heard. Radial and pedal pulses were assessed, both were palpable. Graded 2+ and present bilaterally. Capillary refill was noted at < 3 seconds. Patient exhibited no signs of edema or neck vein distention. Patient had a saline lock IV on the left forearm. IV site appeared dry and intact upon examination.
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	Patient showed no signs of accessory muscle use upon breathing. No noted deviations or SOB. Patient denies any issues with breathing. IS was

	ordered for post-operative recovery. Patient reported using it 10x/hr as instructed. Patient has hx of asthma and is prescribed a rescue inhaler, but reports not using it often.
GASTROINTESTINAL (2 points): **Diet at home: regular** **Current Diet: regular** **Height: 162.5 cm** **Weight: 112.9 kg** **Auscultation Bowel sounds:** **Last BM: 2/11/2019** **Palpation: Pain, Mass etc** **Inspection: distention, incisions, scars, drains, wounds** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:_____**	Patient's current diet is regular. Patient reports this is the same when she is home. Patient reports occasional alcohol use. Bowel sounds were present in all four quadrants, no BM noted post-operative. No noted abnormalities or tenderness of the abdomen upon inspection, palpation, or percussion. No ostomy, NG/PEG tubes present. Patient was administered MiraLAX as a laxative to stimulate a BM.
INTEGUMENTARY (2 points): **Skin color** **character, turgor, rashes, bruises:** **wounds:** **Braden scale : _19_**	Braden scale: 19 Patient reported that she is Caucasian and presented with a fair skin tone. Skin turgor appears normal. Skin appears pink, dry and intact

Drains present: Y☐ N ☒ **Type_____**	with no noted abnormalities or breaks in the skin. No bruising or rashes present. Patient's hair is white/grey. Patient has saline lock IV in left forearm. Her RN informed stated it is used for pain medication administration. No drains present.
HEENT (2 points): **Head:** **Ears:** **Eyes:** **Nose:** **Teeth**	Patient presented normocephalic. Hair is grey in color with no thinning or balding. Ears show no signs of drainage or infection, tympanic membrane visible and was noted pearly grey. PERRLA noted. Patient uses glasses. Nose showed septum midline, turbinates visible and equal bilaterally. Oral mucosa is pink and slightly dry, patient stated she hadn't had much to drink yet in the morning. Teeth presented off-white in color with none missing.
GENITOURINARY (2 Points): **Color, character, quantity of urine, pain,** **Dialysis Y ☐ N ☒** **Inspection of genitals** **Catheter: Y ☐ N ☒** **Type_____**	Patient is able to ambulate to room toilet with walker x1. No dialysis or catheter. No noted genital abnormalities. Urine presented dark yellow. Patient denied pain, hesitancy, or urgency upon urination. Patient is on I&Os.
PSYCHOSOCIAL/CULTURAL (2 points):	Patient presented in good spirits. Patient stated she was ready to return home and get back to her

Coping methods, **Educational level** **Developmental level,** **Ethnicity,** **Religion & what it means to pt.** **Occupation (previous if retired)** **Personal/Family Data (Think about home environment, family structure, and available family support)**	normal daily activities. She was motivated to regain mobility and was eager to participate in PT, walk the halls, and use the CPM. Patient's two sisters were present at bedside by midmorning. Patient denies any past tobacco use. Patient stated occasional alcohol use. Patient lives alone, but has frequent visits from her daughter. Patient stated her daughter will be assisting her upon discharge. Patient appears to have good family support. Patient reported following on religion and is unemployed.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0843	**5/10**	**L knee**	**"dull"**	**"achy, sore"**	**Pt. refused pain meds**
1030	**6/10**	**L knee**	**moderate**	**"sore"**	**Toradol 15 mg IV push**

IV Assesssment (2 Points)

Site Location, Patency/Condition & Date	Fluid Type/Rate or Saline Lock
Right forearm Date: 2/12 IV site is dry and intact. No noted signs of infiltration or phlebitis.	Saline lock

Intake and Output during Your Shift (2 points)

Intake	Output
828 ml	Unable to measure. Pt. voided without hat in place**.**

Nursing Care

Summary of care- Narrative of Nursing care provided, patient status throughout the day, any major concerns, etc (2 points): Patient was doing very well first day post-operative. Patient spent first half of the morning in her bedside chair, the last half of the morning she spent in bed. Patient had one visit with PT approximately 0730. She walked down the hallway with walker twice during my shift, once with PT and I walked with her the second time. Patient was very laid-back, did not require extensive care during my shift. Patient refused pain medications first two times it was offered, but asked for it after her second walk, Toradol was administered at 1030. Other hospital medications were given PO at 0800. Patient spent two sessions on the CPM during my shift, upon her own request. Patient seemed very motivated to ambulate and regain full ability in her left knee. Patient complied with all treatment.

Discharge Planning- Identify discharge needs, education, home health services/equipment, family involved, etc (2 points): Upon discharge, patient will most likely be returning home (it wasn't completely verified with case management during my shift) with her daughter for assistance. Patient seemed familiar with post-operative protocols from her previous TKA, but some refreshing would be beneficial. Patient would benefit from outpatient, or home health, physical therapy. Patient would benefit from a follow up appointment with her orthopedist.

***The following must be listed in order of priority and must be NANDA approved Diagnosis (18 points Total, 3 points for each complete diagnosis with 2 interventions & Rational, 3 points for correct prioritization)**

Nursing Diagnosis	Rational	Intervention (2 per dx)
1. Risk of bleeding [CITATION Pam16 \p 500 \l 1033]	This is related to joint replacement surgery as evidenced by low H&H values.	**1.** Assess surgical wound and dressing each time vitals are checked. **2.** Administer anticoagulant (Xarelto) as prescribed.
2. Impaired physical mobility [CITATION Pam16 \l 1033]	This is related to postoperative musculoskeletal pain and immobilization devices.	**1.** Reinfoce physical therapy education about assistive devices (walker), exercises and stretches, and promote early ambulation. **2.** Educate the patient on the use of pain medications and other nonpharmological

		pain management. Explain the goal is to prevent the pain not treat it.
3. Post-operative pain [CITATION Pam16 \p 505 \l 1033]	This is related to joint replacement surgery	**1.** Frequently assess the patient's pain using the numeric pain rating scale. **2.** Administer pain medication as prescribed and tolerated.
4. Deficient knowledge [CITATION Pam16 \p 507 \l 1033]	This is related to unfamiliarity with potential interaction between NSAIDs and herbal products	**1.** Determine the patient's full home medication list and identify any herbal products that may interact with pain medication. **2.** Educate patient on signs of bleeding, tarry stools,

		hematuria, bleeding gyms, hematemesis, etc.
5. Deficient knowledge [CITATION Pam16 \p 502 \l 1033]	This is related to unfamiliarity with CPM and other exercises prescribed post TKA.	**1.** Provide education for the joint strengthening and ROM regimen. Reinforce PT teaching. **2.** Educate patient on the logistics of the CPM.

Overall APA Format/Neatness/Grammar (5 point):

Concept Map Attached (20 points):

References

ATI Nursing Education. (2016). *Content Mastery Series: RN Adult Medical Surgical Nursing Edition 10.0.* Assessment Technologies Institute, LLC.

Deirmengian GK1, Z. B. (2011). Leukocytosis is common after total hip and knee arthroplasty. *PubMed*.

Janice L. Hinkle PhD, R. C. (2017). *Brunner & Suddarth's Textbook of Medical-Surgical Nursing.* New York, New York: Wolters Kluwer.

Jones & Barlett Learning. (2018). *Nurse's Drug Handbook 17th Edition.* Burlington, MA: Jones & Bartlett Learning.

Swearingen, P. L. (2016). *All-in-One Nursing Care Planning Resource 4th Edition.* St. Louis Missouri: Elsevier.

Zhong-Yi Chen, H.-Z. W.-B. (2015). Postoperative Changes in Hemoglobin and Hematocrit in Patients Undergoing Primary Total Hip and Knee Arthroplasty. *Chinese Medical Journal*, 197.