N311 Care Plan #4

Lakeview College of Nursing

Hope Dykes

Demographics (5 points)

Date of Admission 10/22/19	Patient Initials RJ	Age 76	Gender M
Race/Ethnicity C	Occupation Retired Professor	Marital Status M	Allergies Verapamil, Fioricet w/ Codeine, Zofran
Code Status FULL	Height 74.0”	Weight 204 lbs	

Medical History (5 Points)

Past Medical History: Depression, Hypertension, Coronary Artery Disease, Insomnia, Osteoarthritis, Chronic Diastolic Heart Failure, SA Node Dysfunction, Paroxysmal Atrial Fibrillation, Paroxysmal Supraventricular Tachycardia, Migraines

Past Surgical History: Malignant Melanoma removal, Cervical Fusion of C4-C5, Mitral Valve Repair, Pacemaker Placement

Family History: Mother died at age 69. He thinks maybe from Parkinson’s, but unsure. Father died of malignant melanoma at age 49. Pt has 2 daughters, alive and healthy.

Social History (tobacco/alcohol/drugs): No history of tobacco use, drugs, or alcohol in the home.

Admission Assessment

Chief Complaint (2 points): Back and Neck Pain, Numbness of Left Arm and Hand

History of present Illness (10 points): Patient reports that up until a few weeks ago, he was active at the gym and was in “very good shape”. About 4-5 weeks ago, the patient noticed numbness in his left hand. He didn’t worry too much until he could not pick things up. The numbness started to move up his left arm, so he went to a physician. At this time, he had no pain, just numbness. He says tests showed problems with his spine, so he went in for surgery 2 weeks ago to correct his C4-C5. Since his surgery, he has experienced total loss of

movement and feeling in his left arm and hand, extreme neck and back pain, and partial loss of feeling in his right hand. He was admitted to rehab yesterday for pain control and physical therapy. He is hoping to go home soon, but he says he anticipates another surgery will be necessary. This condition is currently being managed with pain meds around the clock, physical therapy, and rest to help him heal.

Primary Diagnosis

Primary Diagnosis on Admission (3 points):Back and Neck Pain from Cervical Fusion of C4-C5.

Secondary Diagnosis (if applicable): Chronic Diastolic Heart Failure, CMC Arthritis, Hx of Malignant Melanoma, and hx of Mitral Valve Repair

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

Severe neck pain following anterior cervical discectomy and fusion (ACDF) occurred in about 1/3 of patients up to 3 months following surgery. The majority of these patients required medical interventions for their pain. (27/45 patients). These treatments included physical therapy, medication, and nerve blocks.

ACDF surgery carries many risks for complications. These are increased when spinal stenosis is severe. They can range from problems with screws placed in the spine causing nerve damage to pseudoarthritis to death. Despite the risks, this surgery is still widely used to correct spinal stenosis, tumors, trauma, degeneration, and other spine damage.

My patient received this surgery in response to losing feeling and use of his left arm. He reports he had always been physically active and has been the primary caregiver to his disabled wife for several years. He went to his primary care provider "a few weeks ago" to get checked out for numbness/ loss of use of his left hand and arm. The provider recommended he be seen by a surgeon, and he says he was scheduled for surgery within a week of his appointment.

He says prior to his surgery, he was not experiencing a lot of pain, but he did have increasing paralysis on his upper left extremity. Following surgery, he has experienced "debilitating" neck and back pain. He is also currently facing complete paralysis of his left hand and arm, weakness in his left leg that has led to falls, and new weakness and numbness in his right hand. He believes these may have been caused partially by his surgery. My patient believes he will need another surgery in the future and says he plans to use a different surgeon and facility.

Pathophysiology References (2) (APA):

References

Cheung, J. P., & Luk, K. D. (2016). Complications of Anterior and Posterior Cervical Spine Surgery. *Asian spine journal*, *10*(2), 385–400. doi:10.4184/asj.2016.10.2.385

Kirzner, N., Etherington, G., Ton, L., Chan, P., Paul, E., Liew, S., & Humadi, A. (2018). Relationship between facet joint distraction during anterior cervical discectomy and fusion for trauma and functional outcome. *The Bone & Joint Journal*, *100–B*(9), 1201–1207. https://ezproxy.lakeviewcol.edu:2097/10.1302/0301-620X.100B9.BJJ-2018-0199.R1

Laboratory Data (20 points)
If laboratory data is unavailable, values will be assigned by the clinical instructor

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

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	**4.0-4.9** ***10^6/uL***	**4.46** ***10^6/uL***	-	
Hgb	**12.0-16.0** ***g/dL***	**13.8** ***g/dL***	-	
Hct	**37.0-48.0%**	**41.0%**	-	
Platelets	**150-400** ***10^3/uL***	**158** ***10^3/uL***	-	
WBC	**4.1-10.9** ***10^3/uL***	**8.49** ***10^3/uL***	-	
Neutrophils			-	
Lymphocytes			-	
Monocytes			-	
Eosinophils			-	
Bands				

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-	**135-145** ***mmol/L***	**135** ***mmol/L***		
K+	**3.5-5.1** ***mmol/L***	**4.8** ***mmol/L***		
Cl-	**98-107** ***mmol/L***	**101** ***mmol/L***		
CO2	**21.0-32.0** ***mmol/L***	**26.0** ***mmol/L***		

Glucose	**60-99 *mg/dL***	**86 *mg/dL***		
BUN	**5-20 *mg/dL***	**13 *mg/dL***		
Creatinine	**0.5-1.5 *mg/dL***	**0.78 *mg/dL***		
Albumin				
Calcium	**8.5-10.1 *mg/dL***	**8.6 *mg/dL***		
Mag	**1.6-2.6 *mg/dL***	**2.2 *mg/dL***		
Phosphate	-			
Bilirubin	-			
Alk Phos	-			

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 and Clarity	**Colorless-Yellow, Clear**	None on file.		
pH	**5.0-7.0**			
Specific Gravity	**1.003-1.005**			
Glucose	**Negative**			
Protein	**Negative**			
Ketones	**Negative**			
WBC	**0-25/*uL***			
RBC	**0-20/*uL***			
Leukoesterase	**Negative**			

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 culture on file.**
Blood Culture				**No culture on file.**
Sputum Culture				**No culture on file.**
Stool Culture				**No culture on file.**

Lab Correlations Reference (APA):

Capriotti, T., & Frizzell, J. P. (2016). *Pathophysiology: introductory concepts and clinical perspectives*. Philadelphia: F.A. Davis Company.

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

Axial CT of Cervical Spine w/out Contrast: (Postsurgical): Osteophyte no longer evident. Severe bilateral central spinal stenosis and cord deformity, more advanced on the right. Degenerative change at C4-C5 moderate-severe central spinal narrowing and severe bilateral neural foraminal stenosis remaining worse on the right.

X-ray Chest AP/PA only: Post-cardiac valve replacement. Dual-lead pacemaker is stable. Pulmonary vascular congestion is noted. No evidence for pneumothorax. Cardiomegaly present.

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

Medications (5 required)

Brand/Generic	**Norvasc/ Amlodipine Besylate**	**Lipitor/ Atorvastatin**	**Coreg/ Carvedilol**	**Cymbalta/ Duloxetine**	**Oleptro/ Trazodone**
Dose	**10mg**	**20mg**	**12.5mg**	**30mg**	**100mg**
Frequency	**qd**	**qd w/ evening meal**	**BID**	**qd**	**qhs**
Route	**Oral**	**Oral**	**Oral**	**Oral**	**Oral**
Classification	**Antihypertensive**	**Antihyperlipidemic**	**Antihypertensive, Heart failure treatment adjunct**	**Antidepressant (SSRI)**	**Antidepressant**
Mechanism of Action	**Inhibits influx of extracellular calcium ions across slow calcium channels in myocardial and smooth muscle. This decreases the intracellular calcium level, inhibiting smooth-muscle cell contraction and reducing peripheral vascular resistance and reducing systolic and diastolic blood pressure. This decreases the myocardial workload, oxygen demand, and possibly angina.**	**Reduces plasma cholesterol and lipoprotein levels by increasing liver cell LDL receptors to increase LDL uptake and breakdown.**	**Reduces cardiac output and tachycardia. Causes vasodilation and decreases peripheral vascular resistance, which reduces blood pressure and cardiac workload.**	**Inhibits dopamine, serotonin, and norepinephrine reuptake to the CNS. This may elevate mood and inhibit nerve pain signals.**	**Blocks serotonin reuptake inhibitors, causing an antidepressant effect. It produces a histamine blockade, causing a sedative effect. It also inhibits the vasopressor response to norepinephrine which reduces blood pressure.**

Reason Client Taking	**Pt has a history of chronic diastolic heart failure. This medication reduces blood pressure and reduces myocardial workload.**	**Reducing LDL cholesterol and plaque will decrease the patient's heart workload. The patient has a pacemaker and mitral valve replacement, so LDL cholesterol should be kept low.**	**Pt has a history of chronic diastolic heart failure. This medication reduces cardiac workload.**	**Pt is taking to control depression caused by recent life changes.**	**Pt is taking to control depression caused by recent life changes.**
Contraindications (2)	**Aliskiren therapy in patients with diabetes or renal impairment. Hypersensitivity to amlodipine or its component.**	**Active hepatic disease, hypersensitivity to atorvastatin or its components.**	**Asthma, severe bradycardia.**	**Hepatic insufficiency, hypersensitivity to duloxetine or its components.**	**Recovery from acute MI, hypersensitivity to trazodone or its components.**
Side Effects/Adverse Reactions (2)	**Anxiety, Constipation**	**Depression, Arrhythmias**	**Depression, hypertension.**	**Anxiety, hypertension**	**Depression, heart failure.**

Medications Reference (APA):

Deglin, J. H., & Vallerand, A. H. (2010). ***2010 Drug information update for Davis's drug guide for nurses, eleventh edition and Nurses med deck, eleventh edition*****. Philadelphia: F.A. Davis.**

Jones & Bartless Learning. (2019). ***2019 Nurse's drug handbook*** **(18th ed.). Burlington, MA**.

Assessment

Physical Exam (18 points)

GENERAL: Pt appears well. A&O x4. **Alertness: Pt is very alert, conversational. Oriented to person, time, place, and situation** **Distress: No acute distress** **Overall appearance: Pt appears well groomed and in good spirits.**	
INTEGUMENTARY: **Skin color: Pink** **Character: Dry** **Temperature: Warm** **Turgor: Rapid Recoil** **Rashes: None noted** **Bruises: Bruise present on pt left side** **Wounds: .** **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	**Bruise present on pt left side. Pt reported he has had several falls over the past few weeks, and he was unaware of bruising but says he "figures it happened during a recent fall".** **Pt has healing surgical wound on anterior right side of neck from recent spinal surgery. Healing well. No coverings present.** **Marked 2 points off Braden Scale due to pt having a walker present and having a recent fall hx upon admission.**
HEENT: **Head/Neck: Head and neck were normal cephalic. Healing wound noted on right side of neck due to recent spinal surgery.** **Ears: No lesions or rashes noted on auricle. Pt has good hearing in both ears.** **Eyes: PERRLA. Pt wears glasses. Good ROM.** **Nose: Septum midline, no deviations noted.** **Teeth: Pt has natural teeth. Good dentition. Some teeth missing on bottom due to football injury in college.**	.
CARDIOVASCULAR: **Heart sounds:** **S1, S2, murmur present.** **Cardiac rhythm (if applicable):** **Peripheral Pulses: Brachial and Radial pulses 3+ bilaterally. Radial Pulse=82bpm**	**Noted S1, S2, and murmurs. Pt has had pacemaker placed and mitral valve replacement. There were some sounds I did not recognize.**

Capillary refill: <3 sec **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema: None noted.**	
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character Lung sounds clear bilaterally with no signs of crackles or wheezes.**	.
GASTROINTESTINAL: **Diet at home: Regular (“healthy”)** **Current Diet: Regular** **Height: 74.0”** **Weight: 204lbs.** **Auscultation Bowel sounds: Bowel sounds present in all 4 quadrants.** **Last BM: 10 days ago** **Palpation: Pain, Mass etc.: No pain or masses upon palpation.** **Inspection: Bruise noted on left side. No other wounds, distention, scars, or drains noted on abdomen.** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	**Pt reports he eats a lot of fruits and vegetables at home. While he is not listed as a cardiac specific diet, he says this surprises him and “they (Clark-Lindsey) will probably change that”.** **Pt reports no BM for the past 10 days (since surgery). He says this is to be expected given his current opioid use, immobility, and diet changes since he has left home.**
GENITOURINARY: **Color: Light yellow** **Character: Clear** **Quantity of urine: Regular** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals: Did not complete.** **Catheter: Y ☐ N ☒** **Type:** **Size:**	
MUSCULOSKELETAL: **Neurovascular status:** **ROM: Decent on right side with effort. Good with left leg. Nonexistent with left arm.**	**Pt is able to get up independently and get to walker. He is still using a walker due to increasing weakness on left side of body and due to recent falls over the past 4-5 weeks. Prior to recent surgery, patient was completely**

Supportive devices: Walker in room and at home. **Strength: Very poor on left upper extremity. Moderate strength on right side.** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☒ N☐** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib) X** **Needs assistance with equipment X** **Needs support to stand and walk☐**	**independently mobile.**
NEUROLOGICAL: **MAEW: Y ☐ N☒** **PERLA: Y ☒ N☐** **Strength Equal: Y ☐ N ☒ if no - Legs ☐ Arms ☒ Both ☐** **Orientation: Oriented x4 to person, place, time, and situation.** **Mental Status: Clear.** **Speech: Speech is clear and easily understood.** **Sensory: Pt uses glasses all the time.** **LOC: Alert and Conversational.**	**Pt cannot move left arm at all. He is having increasing weakness on left side and right upper extremity.**
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):**	**The patient lives at Clark-Lindsey village with his wife. She is disabled and wheelchair bound, and he is her primary caregiver at home. He says up until a few months ago, he was very active and enjoyed running and biking. He is a former college football player and retired university professor. As a result, his coping mechanism has been to watch current news and read magazines to keep up with current political news. He enjoys reading about philosophy and history as well. The patient reports he is not overly religious. He says he has been depressed recently with losing the use of his left arm and having spinal surgery. He says it has been difficult to care for his wife the way he always has. The patient has recently started taking antidepressants to help him deal with the stressors. He has two daughters. He enjoyed talking about them a lot, and he bragged about how proud he is of all they have accomplished.**

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1030	**82**	**95/64**	**12**	**97.5 F**	**97%**

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1030	**3/10**	**Neck**	**"Much better than earlier"**	**Sharp, Stabbing**	**Pain meds given 1 hr. prior. Brought pain from 8/10 to 3/10.**

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
240mL OJ, 20mL Coffee= 260mL liquid **100% food**	**1x void in my shift, no BM during shift**

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis

Nursing Diagnosis	Rational	Intervention (2 per dx)	Evaluation
• Include full nursing diagnosis with "related to" and "as evidenced by"	• Explain why the nursing diagnosis was chosen		• How did the patient/family respond to the nurse's actions? • Client response, status

components			of goals and outcomes, modifications to plan.
1. Impaired Physical Mobility	**Related to spinal surgery and narrowing of spinal canal as evidenced by patient's report, "I cannot move or feel my left arm. My right arm is now going numb".**	**1.Passive ROM exercises with left hand and arm. Active ROM exercises with right hand and arm completed by the end of my shift.** **2.Ensure that no hot water comes into contact with patient's hands or arms where feeling is decreased. Check and monitor skin integrity during every shift.**	**1.ROM exercises were successful. Pt was able to move right arm and hand and push against mine. I pushed gently on left hand and moved in a circle to stretch arm muscles. Goal met.** **2.Goal met. Pt did not come into contact with hot water on my shift, and skin integrity was checked and in tact.**
2. Anxiety	**Related to caring for his wife and continuing daily activities when he returns home as evidenced by patient's statement: "I'm really worried I may not be able to take care of my wife, and I don't know if I'm even going to be physically active myself".**	**1. Develop a plan to get wife cared for with the patient to ease anxiety during my shift. This includes discussions about his daughters coming home more frequently or staying in the home while necessary.** **2.Discuss ways during my shift to make the home safer in case patient is unable to keep balance well upon returning home.**	**1.Goal met. Discussion went very well. During my shift, daughter agreed to come stay and help care for disabled mother until patient was able to help. In the case patient did not improve, daughter and pt discussed possibility of long-term care housing.** **2.Goal partially met. Discussion went well, however, pt reports he cannot remove area rugs from home even though he has tripped on them "several times" over the**

		This will include suggestions like removing floor rugs.	**past few weeks. He says they are his wife's art, and it is important to her to have them around the home. I suggested he move them out of the main walkway, which he says he will consider.**

Other References (APA):

Concept Map (20 Points):


Subjective Data
Pt reports left hand/ arm weakness, loss of movements. Reports it is spreading and getting worse post-surgery.
“A few weeks ago, it started to just stop working”.
“A lot of falls over the past 4 or 5 weeks. I think it’s from this weakness spreading on my left side”.
Nursing Diagnosis/Outcomes
paired Physical Mobility: Goal Met. Pt completed ROM exercises and skin integrity was good throughout shift.
Anxiety: Goal partially met. Pt helped develop a plan for his oldest daughter to be around more to help with spouse care, but he is still anxious about his own physical deterioration. Pt refuses to remove floor rugs from home, but he says he will consider moving them out of main walkway.
Objective Data
BP: 95/64
Pulse: 82bpm
Temp: 97.5 F
Resp: 12
O2: 97%
Pain: 3/10
Pt has scar on right side of nec
from recent surgery. Appears
well and comfortable.
Recent C4-C5 cervical fusion per
medical chart.
Patient Information
76 yo Caucasian Male
Retired University Professor
Former College Football Player
Lives with disabled Wife, who he cares for
Hx of mitral valve replacement and pacemaker
Nursing Interventions
Passive ROM exercises on left (more affected
ide).
tive ROM exercises on right (less affected
e).
id heat on limbs and check skinintegrity.
evelop plans with patient to ease anxiety
egarding home life once discharged.