N311 Care Plan #4

Lakeview College of Nursing

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Demographics (5 points)

Date of Admission	Patient Initials	Age	Gender
10/11/19	**C.H.**	**04/14/1939 (80 y/o)**	**Male**
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
White/Caucasian	**Retired**	**Widowed**	**NKA (no known allergies)**
Code Status	**Height**	**Weight**	
No CPR full treatment	**5'8"**	**162 lb**	

Medical History (5 Points)

Past Medical History: Barrett's esophagus, multi-level degenerative disc disease, facet arthritis, moderate T-4 compression fx, A-Fib, Prostate Cancer, osteopenia, basal cell carcinoma and melanoma, GERD, HTN

Past Surgical History: Endoscopy, gastroscopy, ureter stent placement, urethra surgery, urethroplasty

Family History: Mother: no known problems, father: cancer, brother: diabetes, brother: coronary artery disease

Social History (tobacco/alcohol/drugs): Pt reports use of tobacco (smoking) as a teenager for one year. No alcohol or recreational drug use.

Admission Assessment

Chief Complaint (2 points): Back pain

History of present Illness (10 points): Onset: On October 11th, an 80 y/o white, widowed, male was admitted to Carle hospital for increasing back pain. Location: lower back. Duration: about two weeks earlier, on September 20th, the pt came into the ED because he had fallen. He missed a step when walking down stairs at a construction site and was unable to get up. Pt stated, "over the next two weeks my pain became worse and worse. It was difficult to get into a comfortable position." Characteristics: The pt is experiencing extreme, throbbing, dull, achy, back pain.

Aggravating: moving too much exacerbates his pain. Relieving: moving in a more comfortable position in bed with support of pillows. Treatment: use of air mattress, increased Robaxin, and using ice packs 4x a day to relieve pain.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Pain management

Secondary Diagnosis (if applicable): n/a

Pathophysiology of the Disease, APA format (20 points): Multi-level degenerative disc disease (DDD) occurs when the discs between the vertebrae become compressed or misaligned, particularly in the lumbar area of the spinal column (Capriotti, 2015). This misalignment causes the bones to rub together and impingement of spinal nerves. The major change that occurs in the joints of the body with age is articular cartilage loss. The chondrocytes (cartilage cells), synthesize collagen and aggrecan, which gives cartilage tensile strength (Capriotti, 2015). With advanced age, excessive weight bearing, or injurious force, the chondrocytes become weak and lose the resilient stiffness to cushion the joint surface. The chondrocytes continually exposed to the trauma will begin to undergo apoptosis, or programmed degeneration (Capriotti, 2015). As in the case of the pt, his cartilage between his vertebrae is very compromised, which lead to his DDD and compression fractures in his vertebrae. This condition is the most common cause of back pain for adults throughout the world. The pt has a history of facet arthritis, and this contributes to his DDD along with the explanation of his lower (lumbar) back pain. Additionally, the pt has compression fractures as noted in his diagnostic imaging in T4, T11-12 and L2-3.

Some common causes of DDD include older age, injury, repetitive movements, obesity, poor posture, and a multitude of other spine conditions that change the way facet joints align.

The pt already had facet arthritis and his fall even further exacerbated his underlying conditions because his pain increased since his incident. As the body ages, the facet joints begin to deteriorate the vertebral discs. As the load of the body weight shifts to the facet joint, the cartilage breaks down, the joint space narrows, and the bones rub together.

Common signs and symptoms of DDD include: pain in the low back (cervical or lumbar commonly) that radiates down the back of the leg (also called “sciatica”), pain in the buttocks or thighs, pain that worsens when sitting, bending, lifting or twisting, numbness, paresthesia, difficulty walking (if DDD is in lower spine), tenderness of site, paraspinal muscle spasm, and numbness in arms or legs (Degenerative Disc Disease n.d.). Since the pt is in severe pain he is scheduled to bedrest and state he has “tingling and numbness” in his legs and “it hurts to move too much.”

There are some diagnostic testing used to confirm for DDD and these include X-ray, CT, or MRI which can show the vertebral malalignment along with demonstrating disc collapse (Capriotti, 2015). In addition, Electromyography (EMG) can show muscle dysfunction. The pt received MRI’s of his lumbar and thoracic spine to show his DDD diagnosis.

DDD cannot be reversed, however there are treatments available to help manage the pain. Treatments of DDD include: exercising, physical therapy, pain management techniques, and alternatives such as chiropractic care (Capriotti, 2015). The goal of these processes is to stimulate blood flow for healing, mobility, and to alleviate pain.

Pathophysiology References (2 points) (APA):

Capriotti, Theresa M. and Frizzell, Joan Parker, "Pathophysiology: Introductory Concepts and Clinical Perspectives" (2015). *Faculty Bookshelf*. 75.
https://hsrc.himmelfarb.gwu.edu/books/75

Degenerative Disc Disease. (n.d.). Arthritis Foundation. Retrieved October 25, 2019, from https://www.arthritis.org/about-arthritis/types/degenerative-disc-disease/.

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	4.10 - 5.70	3.30	* Unable to obtain	Trauma from back fractures and injuries
Hgb	12.0 – 18.0	11.0	*	Hgb is lowered because of a deficient number of RBC's
Hct	37.0 – 51.0%	33.4 %	*	Hct is lowered because there is a low number of RBC's.
Platelets	140-400	290	*	
WBC	4.00 – 11.00	9.33	*	
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-	136 - 145	137	*Unable to	

			obtain	
K+	**3.5 – 5.1**	**3.9**	*****	
Cl-	**98 - 107**	**103**	*****	
CO2	**21.0 – 32.0**	**29.3**	*****	
Glucose	**60-99**	**98**	*****	
BUN	**7-18**	**13**	*****	
Creatinine	**0.70-1.30**	**0.77**	*****	
Albumin	**3.4-5.0**	**None taken***	*****	
Calcium	**8.5-10.1**	**8.5**	*****	
Mag	**1.6-2.6**	**2.4**	*****	
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 & Clarity				****No cultures completed for this pt.****
pH				
Specific Gravity				
Glucose				
Protein				

Ketones				
WBC				
RBC				
Leukoesterase				

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			**n/a***	****No cultures completed for this pt.****
Blood Culture			**n/a**	
Sputum Culture			**n/a**	
Stool Culture			**n/a**	

***none taken**

Lab Correlations Reference (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2019). Mosbys diagnostic and laboratory test reference. St. Louis, MO: Elsevier.

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

MRI thoracic spine : There is no acute osseous abnormality found. However, a moderate T4 compression fracture is seen, but it does not appear recent. There is retropulsion of the posterior superior aspect of T4 resulting in moderate central spinal canal narrowing. There is mild anterior wedging of T11 and T12 that does not appear recent. There is ossification of the anterior longitudinal ligament and abnormal widening of the T9-10 disk space which could be due to the large Schmorl's nodes and edema in the disc.

MRI lumbar spine: There is abnormal edema in the L2-3 disc along with multilevel degenerative disc disease and facet arthritis, that appears worse at L3-4 with moderate central spinal canal narrowing and moderate bilateral foraminal narrowing.

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

Medications (5 required)

Brand/Generic	**Oxycontin/Oxecta**	**Lipitor/ atorvastatin**	**Methocarbamol /Robaxin**	**Miralax/ polyethylene glycol**	**Flomax Tamsulosin**
Dose	**15 mg**	**80 mg**	**1,500 mg**	**14g**	**0.4 mg**
Frequency	**2x day**	**1x daily**	**3x day**	**1x day**	**2x day**
Route	**PO**	**PO**	**PO**	**PO**	**PO**
Classification	**Analgesic**	**Antihyper-lipidemic Reductase inhibitor**	**Skeletal muscle relaxant**	**Laxative**	**Benign prosta hyperplasia**
Mechanism of Action	**Alters perception of and emotional response to pain at spinal cord and higher levels of CNS by blocking release of inhibitory neurotransmitters, such as acetylcholine and gamma-aminobutyric acid.**	**Reduce plasma cholesterol and lipoprotein levels by inhibiting HMG-GoA reductase and cholesterol synthesis the liver increasing the number of LDL.**	**May depress CNS, which leads to sedation and reduced skeletal muscle spasms.**	**Functions as an osmotic agent, causing excess water to be retained in the stool, stimulating a bowel movement**	**Block alpha-adremergic receptors in t prostate.**
Reason Client Taking	**For pain**	**To control lipid levels as adjunct to diet in primary hypercholester-olemia**	**For pain**	**For Constipation**	**To treat BPH benign prosta hyperplasia**

Contraindications (2)	**Acute or severe bronchial asthma or hypercarbia in an unmonitored setting.**	**Active hepatic disease, breastfeeding.**	**Hypersensitivity to atropine or ipratropium, hypersensitivity to peanuts**	**Known or suspected bowel obstruction; hypersensitivity to polyethylene glycol**	**Hypersensitiv tamsulosin, quinazolines**
Side Effects/Adverse Reactions (2)	**Agitation, Anxiety**	**Confusion, glycosuria**	**Dizziness, insomnia**	**Bloating, gas**	**Asthenia, diz**

Medications Reference (APA):

Institute for Safe Medication Practices: ISMP Medication Safety Alert. http://www.ismp.org/.

Jones & Bartlett Learning. (2019). 2019 Nurse's Drug Handbook. Burlington, MA

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	 **Alert and oriented to time, place, and person x3** **No distress** **Well-groomed and appropriately dressed**
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	 **Pink** **Dry/Normal** **Warm** **Normal turgor 2+** **None** **Rt arm bruise, bruise on rt hip** **Rt elbow abrasion** **12**
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:**	 **Head and neck symmetrical, normal cephalic** **Patient's ears are free of discharge, difficulty hearing: hearing aids in both ears, eyes symmetrical EOM, nose symmetry, no**

Teeth:	**deviation, dentures well-groomed.**
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	**Heart sounds normal S1 and S2, no murmurs, no gallops or rubs detected in S3 and S4. – has a pacemaker. Capillary refill is less than 3 seconds. Peripheral pulses 2+ symmetric. No neck vein distention. No sign of edema**
RESPIRATORY: **Accessory muscle use: Y☒ N ☒** **Breath Sounds: Location, character**	**Respirations are regular, even and nonlabored, symmetrical, no wheezes or crackles noted.**
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	**Cardiac diet/soft diet (due to dysphagia)** **5'8"** **162 lbs** **Bowel sounds are normoactive in all 4 quadrants** **Last week** **No CVA tenderness** **No abnormalities found upon inspection for distention, incision, scars, drains, or wounds.**
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	**Yellow** **Not cloudy but clear** **Voided 1x**

MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☐** **Needs support to stand and walk☐**	 **Normal ROM** **Strength in both upper and lower extremities** **None, bedrest uses transfer help** **Strength in both arms, legs weak** **high** **Y-– transfer 2 people w/hoyer** **Y – transfer 2 people w/hoyer**
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☒ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	 **Weak legs, Arms strong** **Cognitive of space, time, and location,** **Articulative speech** **Mature and cognitive** **Alert** **No gross focal neurological deficits**
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):**	 **Friends** **Mature** **Christian** **Pt's two good friends were visiting him and visit about once every week or two. Pt does not have any living family members.**

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0950	**81**	**132/72**	**18**	**98.6 F**	**93%**

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1020	**Numeric 0-10**	**Back**	**3/10**	**Tender, throbbing**	**Changing patients position every**

					2 hours or provide pillow for lower back pain

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
OJ – 8 oz., **Water- 3 oz (subtracted from full water** **pitcher filled at beginning of day)** **Total = 11 oz of fluid = 325 mL input** **Food: cream of wheat, pureed omelet** **75% of breakfast.**	**Voided 1x** **BM: 0x (hasn't had one since last week, pt** **has been constipated)**

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

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Pain, Chronic	**Related to back injuries (T4, T11, T12, L3, and L4) as evidenced by: "I have much pain in my lower back"**	**1. Administer pain medication around the clock.** **2.log roll every 2 hours to allow for better blood flow which will help circulation and healing**	**Goal met. Meds are give by the nurse.** **Goal met. Pt adjusted 1x during shift and his pain was relieved from a 6 to a 4. Pt was much happier with the change and in less distress.**

2. Impaired mobility	**Related to pt's degenerative disc disease as evidenced by: "I am unable to walk and moving in bed by myself hurts so much I need help to reposition."**	**1. Check Pt every 2 hours and ask if need position change and adjustment of pillows for better side lying position (best for him)** **2.Range of motion exercise 2x in shift**	**Goal met. Pt was adjusted with better pillowing positioning and he felt much relief and was appreciative.** **Goal partially met, 1x only, pt was agitated because he didn't want to participate in the exercise because it hurts when he moves.**

Other References (APA):

Concept Map (20 Points):

N311 Care Plan #3

Subjective Data

Pt states "I have much lower back pain. It is usually a 7 or an 8. It hurts so much to move and the position that feels best for me is a side-lying position with pillows."

Nursing Diagnosis/Outcomes

1. **Chronic Pain related to back injuries (T4, T11, T12, L3, and L4) as evidenced by: "I have much pain in my lower back"**
   - **Goal met: Meds are give by the nurse.**
   - **Goal met. Pt adjusted 1x during shift and his pain was relieved from a 6 to a 4. Pt was much happier with the change and in less distress.**
2. **Impaired mobility related to pt's degenerative disc disease as evidenced by: "I am unable to walk and moving in bed by myself hurts so much I need help to reposition."**
   - **Goal met. Pt was adjusted with better pillowing positioning and he felt much relief and was appreciative.**
   - **Goal partially met, 1x only, pt was agitated because he didn't want to participate in the exercise because it hurts when he moves.**

Objective Data

Client's chief complaint is intractable back pain. He is diagnosed with multiple Degenerative Disc Disease (DDD).
Vitals:
BP: 132/72
RR: 18
Temp: 98.6 F
SpO2%: 93 %
Pulse: 81

Patient Information

MRI thoracic spine results show moderate T4 compression fracture. There is retropulsion of the posterior superior aspect of T4 resulting in moderate central spinal canal narrowing. There is mild anterior wedging of T11 and T12.

Nursing Interventions

Administer pain medication around the clock.
log roll every 2 hours to allow for better blood flow which will help circulation and healing
Check Pt every 2 hours and ask if need position change and adjustment of pillows for better side lying position (best for him)
Range of motion exercise 2x in shift

N311 Care Plan #3

N311 Care Plan #3