N321 Care Plan 1

Lakeview College of Nursing

Blake Shaw

Demographics (3 points)

Date of Admission	Patient Initials	Age	Gender
07/31/19	TD	62 years old	Male
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
White (Caucasian)	Self Employed	Single	Noknown allergies
Code Status	**Height**	**Weight**	
Full Code	6’11”	119.1kg	

Medical History (5 Points)

Past Medical History: Type 2 diabetes mellitus, hyperlipidemia

Past Surgical History: Partial amputation of right foot

Family History: Brother; type 2 diabetes

Social History (tobacco/alcohol/drugs): 1 pack of cigarettes a week since trying to cut back starting 07/28/2017

Assistive Devices: Walker

Living Situation: Swing bed for the past 2 months

Education Level: Highschool

Admission Assessment

Chief Complaint (2 points): Wound on right foot that wouldn’t heal and became infected.

History of present Illness (10 points): On 07/21/2019 patient was admitted as a swing patient from Carle Hospital with a worsening diabetic wound on his right foot. According to Carle, it was infected. The client reports that it started as a bruise on his foot that just slowly became worse over time. He says that he had spent most of his time sitting in his wheelchair with his feet sitting in place on the footrests of the wheelchair. Describes the infected areas as burning. The client also has a skin infection on his right shin that appears as a scabbed patch of skin that burns as well. He is now being treated with a wound vac and antibiotics, Rocephin and vancomycin.

The client also came in complaining of having frequent bowel movements a week before admission.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Nonhealing ulcer on the right foot.

Secondary Diagnosis (if applicable):

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

A pressure ulcer is an area on the skin where damage occurs from constant pressure being applied to it over time. This may be due to mobility problems or lack of ambulation by caregivers at least every 2 hours (Hinkle & Cheever, 2018). Over time this may cause damage to the tissue and cell necrosis. If left untreated the condition will worsen as more tissue dies and deeper tissues begin to be affected such as fascia and even bone may become exposed. This also may become infected if left untreated as flora overtakes the necrotic tissue. Because the condition worsens over time it has 4 stages it may be classified as.

Physical findings in stage 1 might manifest as a bruise and the skin may be red or warm to the touch. Clients may also verbally complain of pain or discomfort. Because the skin is being exposed to constant pressure and if other factors such as diabetes are compounding the problem there will be poor perfusion of blood to the affected tissue. At stage 2 the subcutaneous layer begins to be affected and breaks in the skin begin to open up leaving the site open to infection as the primary defense of the body has been compromised. Things continue to get worse in the 3rd stage as fascia begins to be affected and the wound begins to crater deep into body tissue. In stage 4 bone may be visible and extensive tissue damage has occurred through the fascia, subcutaneous, and skin layers.

As the condition involves large breaks in the skin, infection is expected. A complete blood cell count may be ordered to get the information of the client's immune system as well as a culture of the wound so that the most appropriate antibiotic is used. A complete metabolic panel may be requested as proper client nutrition is important in being able to rebuild the damage done, especially with the later stages (Hinkle & Cheever, 2018). Pain and vitals should be checked regularly as well as regular ambulation by nursing staff to promote blood perfusion and activity.

Pathophysiology References (2) (APA):

Hinkle, J.L. & Cheever, K. H. (2018). *Brunner & Suddarth's Textbook of medical surgical Nursing (14thed.).* Philadelphia, PA: Wolters Kluwer Health Lippincott Williams & Wilkins.

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	**4.1-5.7 10^6/uL**	**5.56 10^6/uL**	**6.02 10^6/uL**	**Due to patient's oxygen levels of 93% this could be the body trying to find a way to increase the oxygen carrying capacity of his blood.**
Hgb	**12.0-16.0 g/dL**	**14.6 g/dL**	**16.0 g/dL**	
Hct	**37-51%**	**45.2%**	**49.4%**	
Platelets	**140-400 10^3/uL**	**287 10^3/uL**	**239 10^3/uL**	
WBC	**4.00-11.00 10^3/uL**	**8.63 10^3/uL**	**9.64 10^3/uL**	

Neutrophils	**1.6-7.7 10^3/uL**	**4.94 10^3/uL**	**6.05 10^3/uL**	
Lymphocytes	**1-4.9 10^3/uL**	**2.55 10^3/uL**	**2.43 10^3/uL**	
Monocytes	**0-1.1 10^3/uL**	**0.84 10^3/uL**	**0.81 10^3/uL**	
Eosinophils	**0-0.5 10^3/uL**	**0.2 10^3/uL**	**0.26 10^3/uL**	
Bands	**0-0.2 10^3/uL**	**0.07 10^3/uL**	**0.05 10^3/uL**	

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**	**133 mmol/L**	**130 mmol/L**	
K+	**3.5-5.1 mmol/L**	**3.9 mmol/L**	**3.9 mmol/L**	
Cl-	**98-107 mmol/L**	**99 mmol/L**	**98 mmol/L**	
CO2	**21.0-32.0 mmol/L**	**21.6 mmol/L**	**23.0 mmol/L**	
Glucose	**60-99 mg/dl**	**196 mg/dl**	**206 mg/dl**	**The client has uncontrolled type 2 diabetes which results in very high levels of glucose, because his body does not produce enough insulin.**
BUN	**7-18 mg/dl**	**21 mg/dl**	**22 mg/dl**	
Creatinine	**0.8-1.3 mg/dl**	**1.19 mg/dl**	**1.25 mg/dl**	
Albumin				

Calcium	**8.5-10.1 mg/dl**	**8.7 mg/dl**	**9.2 mg/dl**	
Mag	**1.8-2.4 mg/dl**		**1.5 mg/dl**	**Related to client's type 2 diabetes as low magnesium levels are very common with that (Hinkle & Cheever, 2018).**
Phosphate				
Bilirubin				
Alk Phos				
AST	**15-37 u/L**	**17 u/L**	**16 u/L**	
ALT	**12-78 u/L**	**17 u/L**	**24 u/L**	
Amylase				
Lipase				
Lactic Acid				

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				
PT				
PTT				
D-Dimer				
BNP				
HDL	**40-59 mg/dL**		**24 mg/dL**	**The client has a history of hyperlipidemia and low HDL levels are common with that**

				(Hinkle & Cheever, 2018). This could be genetic though his family history does not confirm or deny this.
LDL	**<100 mg/dL**		**70 mg/dL**	
Cholesterol	**<200 mg/dL**		**172 mg/dL**	
Triglycerides	**<150 mg/dL**		**470 mg/dL**	**The patient has a history of hyperlipidemia which is a higher than average level of lipids in the blood. This can be either do to a diet high in fats or genetics (Tayler, Lillis, & Lynn, 2018).**
Hgb A1c				
TSH				

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	**colorless**	**straw, clear**		**The slight amount of yellow color to his urine is most likely caused by very mild dehydration.**
pH	**5-7 ph**	**6.0 ph**		
Specific Gravity	**1.003-1.035**	**1.011**		
Glucose	**negative**	**negative**		
Protein	**negative**	**30**		**Protein in the urine is an indicator of damage to kidney tissue. In this client this is most likely caused by his type 2 diabetes and high blood pressure.**
Ketones	**negative**	**negative**		
WBC	**0-20 /uL**	**36 /uL**		**This indicates that there are white blood cells in the urine which could indicate a urinary tract infection.**
RBC	**0-25 /uL**	**1 /uL**		

Leukoesterase	**negative**	**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				
Blood Culture				
Sputum Culture				
Stool Culture				

Lab Correlations Reference (APA):

Hinkle, J.L. & Cheever, K. H. (2018). *Brunner & Suddarth's Textbook of medical surgical Nursing (14thed.).* Philadelphia, PA: Wolters Kluwer Health Lippincott Williams & Wilkins.

Tayler, C., Lillis C., Lynn, P. (2018). *Fundamentals of Nursing (8thed.).* Philadelphia, PA: Wolters Kluwer Health Lippincott Williams & Wilkins.

Diagnostic Imaging

All Other Diagnostic Tests (5 points): X-ray of right foot showed evidence of amputation with no other irregularities or bony growths however there was some evidence of tissue irregularities. X-ray of orbits bilaterally showed no metal or foreign bodies. MRI of lower right leg without contrast showed skin thickening, subcutaneous soft tissue edema, ulceration in superfisial lower right compartment, and ulcerations deep to tibialis anterior tendon. MRI of ankle and midfoot

with and without contrast was unfortunately severely degraded by motion artifacts but did show ulceration along the plantar surface of the foot with bone and tissue changes consistent with infection.

Diagnostic Test Correlation (5 points): The results of the foot x-rays didn't show anything beyond the evidence of partial amputation which I found apparent during physical assessment of the client as well as his past surgical history. The amputation was most likely related to his type 2 diabetes as poor blood pursion in the lower extremities is a common complication (Hinkle & Cheever, 2018). I do not know why the x-ray of his eyes was ordered and the results of it came back normal, I should have followed up with the nurse though I'm not certain if she would have known, my suspicion is that it was ordered after the client complained of eye pain which might well have happened in the 2 months he's been in the facility. The MRI of the lower right leg did show definite thickening related to the scabbed patch over his shin that was apparent during physical assessment and that it was superficial which was also what it appeared to be from the surface. The MRI of the ankle and midfoot showed evidence of damage from infection which does make sense as a stage 2 pressure ulcer is visible on ball of his right foot.

Diagnostic Test Reference (APA):

Hinkle, J.L. & Cheever, K. H. (2018). *Brunner & Suddarth's Textbook of medical surgical Nursing (14thed.).* Philadelphia, PA: Wolters Kluwer Health Lippincott Williams & Wilkins.

Current Medications (10 points, 1 point per completed med)
10 <u>different</u> medications must be completed

Home Medications (5 required)

Brand/Generic	ibuprofen (Advil)	Pepto-Bismol	acetaminophen (Excedrin)	acetaminophen (Tylenol)	miconazole nitrate (Lotrimin AF Antifungal)
Dose	200mg	262mg	250mg	325mg	1000mg
Frequency	q6-8 hours prn	q1/2-1 hours prn	q4-6 hours prn	q6-8 hours prn	daily prn
Route	oral	oral	oral	oral	topical
Classification	nonsteroidal anti inflammatory drug	antidiarrheals	analgesic	analgesic	antifungal
Mechanism of Action	-impacts hormones in the body that produce pain and inflammation to reduce pain and inflammation	-bismuth subsalicylate acts as an antacid to correct diarrhea	-inhibits prostaglandins, a hormone that transmits pain signals	-inhibits prostaglandins, a hormone that transmits pain signals	-inhibits protein synthesis of cells in fungus
Reason Client Taking	-to reduce pain	-to combat diarrhea	-to reduce pain	-to reduce pain	-to treat athlete's foot
Contraindications (2)	-stomach ulcers	-use of diamox	-liver pathology	-liver pathology	-fungal infection

	-GERD	-use of Zyloprim	-breast feeding	-breast feeding	s of the scalp or nails -if the infection lasts longer than 4 weeks
Side Effects/Adverse Reactions (2)	-abdominal pain - diarrhea	-black tongue -tinnitus	-liver damage -caffeine or alcohol use	-liver damage -caffeine or alcohol use	-itching skin -dry skin
Nursing Considerations (2)	-asses for GI bleeds -monitor intake and outake	-asses for GI bleeds -asses for metabolic acidosis	-assess for GI bleeds -assess for allergic responses	-assess for GI bleeds -assess for allergic responses	-teach patient proper use -assess for skin irritation

Hospital Medications (5 required)

Brand/Generic	atorvastatin (Lipitor)	insulin aspart	insulin glargine	vancomycin (Vancocin)	lisinopril
Dose	20mg	20 units	60 units	1250mg	10mg
Frequency	daily with dinner	before meals & at time of sleep	at bedtime	q12 hours	once daily
Route	oral	subcutaneou	subcutaneou	IV	oral

		s	s	piggyback	
Classification	antihyperlipidemic	antidiabetic	antidiabetic	antibiotic	antihypertensive
Mechanism of Action	Lowers plasma cholesterol by inhibiting HMB-CoA reductase and cholesterol synthesis in the liver by increasing the number of LDL receptors on the liver.	Stimulates glucose uptake by inhibiting the liver from glucose production.	Stimulates glucose uptake by inhibiting the liver from glucose production.	Inhibits RNA and cell wall synthesis in bacteria.	Reduces blood pressure by inhibiting the conversion of angiotensin I to angiotensin II.
Reason Client Taking	Control lipid levels	To control Type 2 diabetes	To control Type 2 diabetes	To treat infection.	To treat hypertension
Contraindications (2)	Liver disease, rise in serum transaminase levels	Hypersensitivity, hypoglycemia	Hypersensitivity, hypoglycemia	Hypersensitivity, hypersensitivity to corn products	diabetes with kidney failure, history of angioedema with ace inhibitors
Side Effects/Adverse Reactions (2)	Dyspnea, arrhythmias	Hypoglycemia, hypokalemia	Hypoglycemia, hypokalemia	Anaphylaxis, diarrhea	Hypotension, angioedema
Nursing Considerations (2)	Measure lipid levels 2 to 4 weeks after starting, monitor diabetic client's blood glucose levels	Always check blood sugar levels before administering, because it's a fast acting insulin give this before meals and make sure	Always check blood sugar levels before administering, this is a slow acting insulin so make sure to educate the patient on the	Watch for signs of hypersensitivity closely when first administering, have supplies readily available in the event of anaphylaxis	Watch for angioedema, monitor blood pressure closely and check before administering

		that they eat	difference between the types of insulin		

Medications Reference (APA):

Bartlett, Jones (2018). *Jones & Bartlett Learning Nurse's Drug Handbook Seventeenth Edition*. Massachusetts, Jones & Bartlett Learning.

Hinkle, J.L. & Cheever, K. H. (2018). *Brunner & Suddarth's Textbook of medical surgical Nursing (14thed.).* Philadelphia, PA: Wolters Kluwer Health Lippincott Williams & Wilkins.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**Patient is alert and oriented. Did appear tired.**
INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:**	**Skin complexion was pale, no tenting, dry, smooth and firm, bruise on right shoulder, scabbed ulcerations on right shin, right foot appears to have been partially amputated,**

Turgor: **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☐** **Type:**	**wound vac over wound under right foot, braden score of 18, no drains present.**
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	**Hair free of lice and dandruff, no breaks in skin, no drainage from ears and tympanic membrane is pearly grey, pupils are equal and reactive, eyes accommodate bilaterally, sclera is white conjunctiva appears pink, mucous membrane is moist, no drainage from nose, teeth appear brushed, gums are pink.**
CARDIOVASCULAR (2 points): **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:**	**Strong S1 and S2 at erbs point, pulses equal on both arms, pulses found at radius, ulna, juglar, and popliteal, cap refill less than 3 seconds, no venous distention in the neck, some edema in right foot and ankle.**
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character**	**Clear lung sounds with no crackles or rubs, no accessory muscle use.**
GASTROINTESTINAL (2 points): **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:**	**Diet at home consisted of a lost of meat potatoes by client report. Normal hospital diet. Height of 6'11". Weight of 119.1kg. Bowels active in all 4 quadrants. Client reports last BM was this morning. Abdomen did have significant visceral fat from client being overweight but no breaks in skin or marks. No pain on palpation. No ostomy present. No nasogastric or other feeding tubes.**

Feeding tubes/PEG tube Y ☐ N ☐ **Type:**	
GENITOURINARY (2 Points): **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☐** **Dialysis: Y ☐ N ☐** **Inspection of genitals:** **Catheter: Y ☐ N ☐** **Type:** **Size:**	**Urine was straw color, clear, and with no foul odor, quantity of last void was 740 ml, client reports no pain with urination, client is not undertaking dialysis, client does not have an indwelling catheter.**
MUSCULOSKELETAL (2 points): **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☐**	**Limbs have equal strength and full range of motion, client does use a walker due to foot ulcer and partial amputation, good strength, client is self sufficient with ADL, client is a fall risk with a score of 30, client is up ad lib.**
NEUROLOGICAL (2 points): **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	**Client is maew, perla, equal strength in legs and arms, awake, oreinted to place and time, speaks clearly and is understandable, client reports being able to see and hear clearly.**
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home**	**Client has been in the switch room for the past 2 months, reports recently being released from prison.**

environment, family structure, and available family support):	

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1155	**97**	**175/107**	**18**	**36.1 C auxiliary**	**93 room air**
1500	**97**	**145/84**	**17**	**97.7 F oral**	**93 room air**

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1300	**0-10**	**n/a**	**0**	**n/a**	**n/a**
1500	**0-10**	**right shin and foot**	**6**	**burning**	**Client was given his prn pain medication**

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:**	Picc line Right arm Picc line was patent No signs of erythema or warmth around site No signs of drainage around site

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
740	**900**

Nursing Care

Summary of Care (2 points)

Overview of care: Client has slept most of the morning and had his wound vac replaced in the evening.

Procedures/testing done: Client had his wound vac replaced.

Complaints/Issues: Client complained of pain at 1500.

Vital signs (stable/unstable):stable

Tolerating diet, activity, etc.: Client reports tolerating diet and complains about having to move to and from the chair.

Physician notifications:

Future plans for patient: Client will attend appointments with wound care specialist.

Discharge Planning (2 points)

Discharge location: Will leave to ho home.

Home health needs (if applicable): Diabetic control.

Equipment needs (if applicable): Insulin and blood glucose tester.

Follow up plan: Avoid relapse of pressure ulcer.

Education needs: Client may need education on the importance of ambulation, diet, and control of type 2 diabetes.

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis and listed in order of priority

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. Risk for loneliness	Client has been in a swing bed with no visitors for 2 months.	**1.** Casual conversations with the client, ask him about the shows he's watching. **2.** Show genuine interest in his conditions.	Client seemed happy to have someone to talk to.
2. Deficient knowledge	Client reports being upset with having to switch from his bed to the chair.	**1.** Educate client on the benefits health benefits of ambulation. **2.** Educate client on the specifics, that ambulation helps prevent clots and promote his healing by helping blood flow around.	Client admits that he shouldn't be upset about it if it'll make him heal faster.
3. Sleep pattern disturbed	Client has been doing little else besides laying in bed and deal with hospital staff regularly have to make checks on him even during the night for the past 2 months.	**1.**Give client a clock. **2**. Teach the client better sleeping techniques.	

Other References (APA):

Tayler, C., Lillis C., Lynn, P. (2018). *Fundamentals of Nursing (8thed.).* Philadelphia,

PA: Wolters Kluwer Health Lippincott Williams & Wilkins.

Concept Map (20 Points):