N311 Care Plan 3

Macy Clark

Lakeview College of Nursing

N311: Foundations of Professional Practice

Professor Hartke

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Demographics (5 points)

Date of Admission 09/08/2022	Client Initials BR	Age 55	Gender Male
Race/Ethnicity Caucasian	Occupation Factory worker	Marital Status Single	Allergies None
Code Status Full code	Height 5'9 1/2	Weight 213.1	

Medical History (5 Points)

Past Medical History: Diabetic, hypertension, alcoholic liver cirrhosis w/ ascites

Past Surgical History: shoulder surgery rotator cuff 7/25/2023

Family History: n/a

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

Smoked 20+ years 1 pack per day, quit 1 year and a half ago; drank 6-7 beers everyday for 7-8

years; tobacco use: patient said "no" but cans were in trash can

Admission Assessment

Chief Complaint (2 points): Weakness and light headedness; patient "feels weird and dizzy"

History of Present Illness – OLD CARTS (10 points):

Patient complains of feeling weak and lightheaded, and "feels weird and dizzy". Symptoms first started about two weeks ago and last consistently throughout the day. Location of origin of these symptoms is the central nervous system/ brain. Patients states that the symptoms get worse when eating foods rich in sugar and after he drinks his coffee with added cream and sugar. The only relieving factor is taking his prescribed medication (Metformin). Patient has visited the hospital prior and was educated on how to monitor blood sugar levels.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Type 2 Diabetes Mellitus

Secondary Diagnosis (if applicable): alcoholic liver cirrhosis, hypo-osmolalaity and hyponatremia, hypokalemia, nutritional anemia, foot drop (right foot), history of falling, unspecified protein caloric malnutrition, alcohol dependence (uncomplicated), spondylosis without myelopathy or radiculopathy; cervial region, hypertension, major depressive disorder, gastro-esophageal reflux disease without esophagitis, granulomatous disorder of the skin and subcutaneous tissue

Pathophysiology

Type 2 diabetes mellitus is a condition often onset in adults that is non insulin dependent and affects the way that the body produces glucose (Banday et al., 2021). Type 2 diabetics struggle with two insulin abnormalities, the first one being insulin resistance which is a result of disruption of cellular pathways (Banday et al., 2021, para. 15). Insulin resistance alter levels of responses or sensitivity to insulin of cells in peripheral, muscle, liver, and adipose (Banday et al., 2021). Decreased sensitivity of these cells to insulin will bringer beta cells to over function to increase insulin and maintain normal blood glucose levels (Banday et al., 2021). Therefore, insulin levels are raised throughout circulation to prevent elevated blood glucose levels. Overtime, this beta cell function to produce more insulin will lead to the second anomaly which is beta cell dysfunction (Banday et al., 2021). Beta cell dysfunction occurs when the beta cells have been overworked for too long and can no longer keep up with the insulin sensitivity (Banday et al., 2021). When beta cell dysfunction begins to develop and there is not enough insulin flowing through circulation, hyperglycemia will arise (Banday et al., 2021). Overtime, there obtaining high blood glucose level can lead to damage of organs throughout the body,

mainly blood vessels, which can lead to heart attack, stroke, and problems with other organs in the body (Department of Health & Human Services, 2004, para. 5). Diabetes will often be associated with hypertension as having a high blood glucose level can damage blood vessels by narrowing them or influencing build up of plaque along the vessel walls (Department of Health & Human Services, 2004). When blood vessels are narrowed or restricted by plaque buildup, blood pressure is forced to increase to push the blood flow through the altered blood vessels. Smoking plays a big part in assisting hypertension due to the effects it has on blood circulation, altering blood vessel structure (Department of Health & Human Services, 2004). Smoking also is a huge single risk factor developing diabetes. Smoking will cancel out all of the healthy lifestyle practices like a healthy diet, healthy weight, good blood sugar, and good blood pressure, which then in turn can lead to development of diabetes (Department of Health & Human Services, 2004, para. 11).

References

Banday, M. Z., Sameer, A. S., & Nissar, S. (2021, August 4). *Pathophysiology of diabetes: An overview*. Avicenna Journal of Medicine. https://www.thieme-connect.com/products/ejournals/html/10.4103/ajm.ajm_53_20#N10A41

Department of Health & Human Services. (2004, October 28). *Diabetes - long-term effects*. Better Health Channel. https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/diabetes-long-term-effects

Laboratory Data (20 points)

If laboratory data is unavailable, values will be assigned by the clinical instructor

CBC <mark>Highlight All Abnormal Labs</mark>—**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	4.28-5.56	3.56	3.52	Diabetic patients are prevalent to obtain anemia, especially those with renal impairment, due to the kidneys failing to produce erythropoietin (Taderegew et al., 2020, para. 8)
Hgb	13.0-17.0	11.9	11.3	Patients with diabetes mellitus will have low hemoglobin associated with decline in glomerular filtration rate, also associated with chronic kidney disease (Kwon & Ahn, 2012).
Hct	38.1-48.9	35.2	33.5	Patients with low hematocrit levels can be indicative of too few healthy red blood cells along with dehydration ("Mayo Foundation for", 2023).
Platelets	149-393	153	215	
WBC	4.0-11.7	6.6	6.9	
Neutrophils	45.3-79.0	59.1	55.9	
Lymphocytes	11.8-45.9	22.9	20.9	
Monocytes	4.4-12.0	15.0	20.0	
Eosinophils	0.0-6.3	2.4	2.4	
Bands	N/A	N/A	N/A	

Chemistry <mark>Highlight All Abnormal Labs</mark>—**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	140	137	

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
K+	3.5-5.1	4.2	4.1	
Cl-	98-107	105	103	
CO2	21-31	28	27	
Glucose	74-109	80	==214==	Patient is a type 2 diabetic experiencing hyperglycemia.
BUN	7-25	16	13	
Creatinine	0.70-1.30	==0.61==	0.76	Low creatinine levels is a precursor of type 2 diabetes mellitus (Røislien et al., 2010).
Albumin	3.5-5.2	==3.2==	3.5	In patients with diabetes, albumin levels are reduced due to decreased insulin because insulin is required for homeostasis of albumin levels (Chen et al., 2016).
Calcium	8.6-10.3	9.2	9.4	
Mag	N/A	N/A	N/A	
Phosphate	N/A	N/A	N/A	
Bilirubin	0.3-1.0	1.0	0.9	
Alk Phos	34-104	==132==	==201==	Elevated alkaline phosphate will be present in patients with liver disorders, often liver cirrhosis (U.S. National Library of Medicine, n.d.).

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	N/A	Clear yellow	Clear yellow	
pH	5.0-8.0	6.0	6.0	
Specific Gravity	1.005-1.034	1.024	1.021	

Glucose			500 A	
Protein	NEG	NEG	NEG	
Ketones	NEG	NEG	NEG	
WBC	N/A	N/A	N/A	
RBC	NEG	NEG	NEG	
Leukoesterase	NEG	NEG	NEG	

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	NEG	NEG	NEG	
Blood Culture	NEG	NEG	NEG	
Sputum Culture	NEG	NEG	NEG	
Stool Culture	NEG	NEG	NEG	

Lab Correlations Reference (1) (APA):

Chen, Q., Lu, M., Monks, B. R., & Birnbaum, M. J. (2016, January 29). *Insulin is required to maintain albumin expression by inhibiting forkhead box O1 protein*. The Journal of biological chemistry. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4732219/

Kwon, E., & Ahn, C. (2012, September). *Low hemoglobin concentration is associated with several diabetic profiles*. The Korean journal of internal medicine. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3443718/#:~:text=Low%20hemoglobin%20concentration%20in%20patients,low%20hemoglobin%20level%20%5B2%5D

Mayo Foundation for Medical Education and Research. (2023, September 19). *Hematocrit Test*.

Mayo Clinic. https://www.mayoclinic.org/tests-procedures/hematocrit/about/pac-

20384728#:~:text=When%20the%20hematocrit%20value%20is,This%20condition%20is

%20called%20anemia

Røislien, J., Hjelmesæth , J., Nordstrand, N., Hofsø, D., Hager, H., & Hartmann, A. (2010, April

18). *Low serum creatinine is associated with type 2 diabetes in morbidly obese women and

men: A cross-sectional study - BMC endocrine disorders*. BioMed Central.

https://bmcendocrdisord.biomedcentral.com/articles/10.1186/1472-6823-10-6

Taderegew, M. M., Gebremariam, T., Tareke, A. A., & Woldeamanuel, G. G. (2020, February

11). *Anemia and its associated factors among type 2 diabetes mellitus patients attending

Debre Berhan referral hospital, north-east ethiopia: A cross-sectional study*. Journal of

blood medicine.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7023873/#:~:text=Anemia%20is%20one

%20of%20the%20commonest%20and%20prevalent%20blood%2Drelated,occurs%20in

%20patients%20with%20diabetes.&text=It%20mostly%20occurs%20in%20DM

%20patients%20who%20also%20have%20renal%20impairment.&text=Evidence

%20indicates%20that%20the%20existence,kidney%20to%20produce%20appropriate

%20erythropoietin

U.S. National Library of Medicine. (n.d.). *Alkaline phosphatase: Medlineplus medical test*.

MedlinePlus. https://medlineplus.gov/lab-tests/alkaline-phosphatase/#:~:text=High

%20alkaline%20phosphatase%20(ALP)%20levels,type%20of%20ALP%20is%20high

Diagnostic Imaging

All Other Diagnostic Tests (10 points): Patient had no diagnostic imaging present in chart. Patient would most likely receive a hemoglobin A1C test.

Assessment

Physical Exam (18 points) – <mark>HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS</mark>

General, Psychosocial/Cultural, and ONE focused assessment specific to the client is required.

The student and instructor may complete these assessments together.

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Patient is alert and oriented x4 with no presentation of distress or discomfort. Patient appears to be in overall well condition physically.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** **Braden Score:** **Drains present:** **Type:**	Skin is olive color and smooth with no lesions or rashes. Temperature was warm and turgor receded immediately. No rashes, lesions, bruising, or wounds present. Patient scored a 21 on the Braden scale. No drains present.
HEENT: **Head/Neck:** **Ears:** **Eyes:**	Head and neck normal shape and symmetrical with no lesions or wounds. Trachea midline, no palpable lymph nodes. No drainage or lesions on the ears. Pupils size 2 and PERRLA with no drooping or drainage. Nose symmetrical with no drainage or tenderness of sinuses. Teeth intact with smoking

Nose: **Teeth:**	stains, moist and pink buccal membranes. .
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:**	Regular heart rate and rhythm with no murmurs. S1 and S2 sounds heard. Carotid pulse 2+, capillary refill less than 3 seconds. No visible jugular vein distention or edema present.
RESPIRATORY: **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character**	Clear to auscultation bilaterally. No crackles, ronchi, or wheezing heard. No retractions and all normal breath sounds heard.

GASTROINTESTINAL:
 	
Diet at home:
 	
Current Diet
 	
Height:
 	
Weight:
 	
Auscultation Bowel sounds:
 	
Last BM:
 	
Palpation: Pain, Mass etc.:
 	
Inspection:
 	
  Distention:
 	
  Incisions:
 	
  Scars:
 	
  Drains:
	No diet restrictions, active bowel sounds heard by auscultation in all four quadrants. Last bowel movement 10/19/23. No signs of pain and no masses felt when palpating abdomen. Abdomen flat with no distention, incisions, scars, drains, or wounds. No ostomy or nasogastric/feeding tubes.

Wounds:
 	
Ostomy: Y ☐   **N** ☐
 	
Nasogastric: Y ☐   **N** ☐
 	
   Size:
 	
Feeding tubes/PEG tube   Y ☐   **N** ☐
 	
   Type:	

GENITOURINARY:
 	
Color:
 	
Character:
 	
Quantity of urine:
 	
Pain with urination: Y ☐   **N** ☐
 	
Dialysis: Y ☐   **N** ☐
 	
Inspection of genitals:
 	
Catheter: Y ☐   **N** ☐
 	
    Type:
 	
    Size:
	Urine yellow and clear. No pain or burning with urination, no dialysis, no catheter. Normal gential anatomy.

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** ☐	ROM intact with no supportive devices. Strength normal bilaterally, no ADL assistance. Patient is a fall risk due to drop foot of the right foot. Patient is active and mobile with no assistance ambulating.

NEUROLOGICAL: **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no - Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Patient A&O x4, MAEW, pupils PERRLA, strength equal bilaterally in all extremities, speech appropriate for developmental age, responds to sensory stimuli.
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):.**	Patient uses tobacco daily. Developmental level appropriate for age, no religion claimed by patient. Patient does not have any family that visits.

Vital Signs, 1 set (5 points) – <mark>HIGHLIGHT ALL ABNORMAL VITAL SIGNS</mark>

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1052	82	111/71	20	97.1 F	95%

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1045	0	N/A	N/A	N/A	N/A

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
No intake monitored.	No output monitored.

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

Nursing Diagnosis • 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 • Explain why the nursing diagnosis was chosen	Interventions (2 per dx)	Outcome Goal (1 per dx)	Evaluation • How did the client/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Deficient knowledge related to inadequate follow through of instructions as evidenced by uncontrolled blood glucose levels (Wagner, 2023, para. 21-23).	Patient stated that blood glucose levels are still "hard to get under control sometimes", and doesn't monitor sugar intake.	1. Provide patient with glucose monitoring device and educate on the use of the device. 2. Educate patient on importance of glucose monitoring.	1. Patient will be able to consistently check own glucose as needed by discharge.	Patient successfully used glucose monitoring device when needed and became more educated on importance of maintaining normal levels.
2. Ineffective health maintenance related to ineffective coping strategies as evidenced by a pattern of lack of	Patient has previously smoked and drank on a daily basis, and continues to chew tobacco currently. Patient does	1. Educate patient on ways to develop confidence in managing health maintenance and managing stress (Wagner, 2023, para. 40) 2. Refer patient to community	1. Patient will show lifestyle changes that will assist in effective health maintenance by discharge.	Patient showed better education on health maintenance and quit chewing tobacco as well as uses a glucose monitor.

health-seeking behavior (Wagner, 2023, para. 29-31)	not monitor sugar intake or glucose levels.	support programs (Wagner, 2023, para. 38)		

Other References (APA):

Wagner, M. (2023, October 10). *Hyperglycemia: Nursing Diagnoses & Care Plans*.

NurseTogether. https://www.nursetogether.com/hyperglycemia-nursing-diagnosis-care-

plan/

Concept Map (20 Points):

Subjective Data

- Weakness and light headedness
- "Feels weird and dizzy"
- No pain

Nursing Diagnosis/Outcomes

- Deficient knowledge related to inadequate follow through of instructions as evidenced by uncontrolled blood glucose levels (Wagner, 2023, para. 21-23).
- Ineffective health maintenance related to ineffective coping strategies as evidenced by a pattern of lack of health-seeking behavior (Wagner, 2023, para. 29-31)

Objective Data

- No I/O monitored
- BP: 111/71
- Pulse: 82
- RR: 20
- Temperature: 97.1 F
- Oxygen: 95% RA

Client Information

- 55 year old Caucasian male diagnosed with type 2 diabetes mellitus. Patient chief complaint of weakness and light headedness and "feels weird and dizzy".

Nursing Interventions

- Provide patient with glucose monitoring device and provide education on use of the device.
- Educate patient on the importance of glucose monitoring.
- Educate patient on ways to develop confidence in managing health maintenance and managing stress (Wagner, 2023, para. 40).
- Refer patient to community support programs (Wagner, 2023, para. 38).