N311 Care Plan #

Lakeview College of Nursing

Name Chloe Stalcup

Demographics (5 points)

Date of Admission	Patient Initials	Age	Gender
09/28/2020	**J.B.**	**76**	M
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
White	**Retired**	**Widowed**	**No known drug allergies**
Code Status	**Height**	**Weight**	
Full code	**5'6"**	**84 kg's**	

Medical History (5 Points)

Past Medical History: Gout arthropathy, chronic kidney disease.

Past Surgical History: Kidney removal.

Family History: Father: Heart disease, myocardial infarction. Mother: Diabetes mellitus. Brother/Maternal Aunt: malignant lung tumor.

Social History (tobacco/alcohol/drugs): Former ½ PPD (pack per day) for 30 years.

Admission Assessment

Chief Complaint (2 points): Patient states, "I got gout in my knees, the back of my right leg and in my left ankle.".

History of present Illness (10 points): Patients pain started about 6-12 months prior. At first symptoms were dull pain but progressed to get worse as time went on. Patient stated, "At first I thought it was just arthritis.". Patient was diagnosed with gout about 3-4 months ago. The chronic pain from gout is located in both knees, and in left ankle. Pain is described as sharp and throbbing. Pain worsens when ambulating at a 7/8 on a scale of 10. This pain with ambulation contributes to an unsteady gait. When resting the pain subsides to a 3 on a scale of 1-10; patient reports this is the only relieving factor. Patient stated to first be diagnosed with gout here at Paris Community Hospital.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Gout, unsteady gait, chronic kidney disease.

Secondary Diagnosis (if applicable):.

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

Pathophysiology of Gouty Arthritis

Gouty arthritis, more commonly known as gout, is a condition that affects the peripheral joints due to a buildup of monosodium urate (MSU), commonly known as uric acid (Gonzalez, 2011). Gout is always involved with hyperuricemia; primary hyperuricemia is directly associated with an under excretion of uric acid from the kidneys, and secondary hyperuricemia is a result of another disease such as psoriasis, obesity, alcoholism, myeloproliferative disease or lymphoproliferative disease (Capriotti, 2020). Patient J.B. has a history of chronic kidney disease and had a kidney removed which may play a role in his gouty arthritis and the rate of which uric acid is excreted.

On a cellular level, gout is caused from MSU crystals being deposited into the joints of patients with hyperuricemia. These MSU crystals are deposited in the joints due to the kidneys inability to remove/excrete uric acid at an appropriate rate (Capriotti, 2020). After MSU crystals are deposited, monocytes/macrophages from the joint phagocytize crystals and cause IL-1β, an inflammatory mediator, to be released and attract neutrophils to the site of inflammation (Gonzalez, 2020). When neutrophils appear, they secrete more inflammatory mediators, further promoting gouty arthritis related inflammation (Gonzalez, 2020). As time progresses there can be damage to the joints affected from the continuous flares of gout inflammation and MSU crystal deposits (Gonzalez, 2020).

The first signs and symptoms of gouty arthritis usually appear as acute inflammation and pain in one joint, often this occurs in the big toe and is known as a podagra (Gonzalez, 2011).

Patient J.B.'s first symptom was arthritic pain in both knees and left ankle. Other symptoms include attacks during the night/early morning; gout is long lasting with a decrease in time spent without symptoms as the disease progresses. (Gonzalez, 2011). A tophi, the deposits of MSU crystals on the surface of the skin, is a physical sign that can appear in the joints of the hands, feet, on the Achilles tendon, and the ear (Capriotti, 2020).

An important diagnostic for gout is the aspiration of joint fluid to test for the presence of MSU crystals (Capriotti, 2020). Other diagnostics that can suggest gout are: serum uric acid levels that exceed 7mg/dL (J.B.'s uric acid levels were 8.6mg/dL on admission), and X-rays can to give a visual of the joint that is inflamed (Capriotti, 2020). Blood tests can also show if white blood cells (WBC's), and neutrophils are elevated which can relate to the inflammatory response (Gonzalez, 2016). Patient J.B. had an increase of both WBC's and neutrophils which is evidence of the inflammation reaction related to gout. Gout attack prevention can be managed through education to reduce red meats and alcohol intake (Capriotti, 2020). A treatment for acute gout is widely managed with Colchicine which blocks inflammation; for long term and chronic treatment Allopurinol and probenecid are used to control the uric acid levels (Capriotti, 2020).

Pathophysiology References (2) (APA):

Capriotti, T. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives*. Philadelphia: F.A. Davis.

Gonzalez, E. B. (2011). An update on the pathology and clinical management of gouty arthritis. *Clinical Rheumatology, 31*(1), 13-21. doi:10.1007/s10067-011-1877-0

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*	3.37 *10^3/uL*		These values are consistent with anemia in patients with chronic kidney disease. (Capriotti & Frizzell, 2016).
Hgb	12.0-16.0g/dL	9.1g/dL		These values are consistent with anemia in patients with chronic kidney disease. (Capriotti & Frizzell, 2016).
Hct	37.0-48.0%	29.1		These values are consistent with a decrease in healthy red blood cells and relation to kidney disease. (Capriotti & Frizzell, 2016).
Platelets	150-400 *10^3/uL*	202 *10^3/uL*		
WBC	4.10-10.90 *10^3/uL*	13.00 *10^3/uL*		White cells are elevated due to inflammatory response (Capriotti & Frizzell, 2016)
Neutrophils	1.50-7.70 *10^3/uL*	12.40 *10^3/uL*		Neutrophils are elevated due to inflammatory response (Capriotti & Frizzell, 2016).
Lymphocytes	1.00-4.90 *10^3/uL*	4.00 *10^3/uL*		
Monocytes	0.00-0.80 10^3*uL*	1 10^3*uL*		Monocytes are elevated due to inflammatory response (Capriotti & Frizzell, 2016)
Eosinophils	0.00-0.50 *10^3/uL*	0.0 *10^3/uL*		
Bands	No lab value noted	No lab value noted		

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	137 mmol/L		

K+	**3.5-5.1 mmol/L**	**4.6 mmol/ L**		
Cl-	**98-107 mmol/L**	**101 mmol/ L**		
CO2	**No lab value noted.**	**No lab value noted.**		
Glucose	**60-99 mg/dL**	**241mg/dL**		**Blood sugar elevated due to an increase of glucose. (Capriotti & Frizzell, 2016).**
BUN	**5-20 mg/dL**	**43 mg/dL**		**Increased BUN levels are consistent with kidney disease (Capriotti & Frizzel, 2016).**
Creatinine	**0.5-1.5 mg/ dL**	**2.1 mg/dL**		**Increased creatine levels are consistent with kidney disease (Capriotti & Frizzel, 2016).**
Albumin	**No lab value noted.**	**No lab value noted.**		
Calcium	**8.5-10.1 mg/dL**	**8.5mg dL**		
Mag	**1.6-2.6 mg/ dL**	**1.7 mg dL**		
Phosphate	**No lab value noted.**	**No lab value noted.**		
Bilirubin	**No lab value noted.**	**No lab value noted.**		
Alk Phos	**No lab value noted.**	**No lab value noted.**		

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-Yellow, Clear**	**N/A**		
pH	**5.0-7.0**	**N/A**		

Specific Gravity	**1.003-1.005**	**N/A**		
Glucose	**Negative**	**N/A**		
Protein	**Negative**	**N/A**		
Ketones	**Negative**	**N/A**		
WBC	**0-25/*uL***	**N/A**		
RBC	**0-20/*uL***	**N/A**		
Leukoesterase	**Negative**	**N/A**		

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 in file**		
Blood Culture		**No culture in file**		
Sputum Culture		**No culture in file**		
Stool Culture		**No culture in file**		

Lab Correlations Reference (APA):

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

All Other Diagnostic Tests (10 points): (These weren't listed in the table above so I made a table.)

Uric acid:	**Normal range: 0.18-0.48 mmol/L**	**Admission range: 8.6 mmol/L**	**Uric acid is elevated due to lack of excretion by kidneys (Capriotti & Frizzel, 2016).**
EFGR:	**Normal range: Above 60mL/min/1.73m²**	**Admission range: 32 mL/min/1.73m²**	**This value is consistent with chronic kidney disease (Capriotti & Frizzel, 2016).**
HCNO3	**Normal range: 18-22 mmol/L**	**Admission range: 22mmol/L**	
ANION GAP	**Normal range: 3-11 mEq/L**	**Admission range: 14.20 mEq/L**	**This elevated value is consistent with acidosis/higher than normal levels of acid in the blood (Capriotti & Frizzel, 2016).**

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

Medications (5 required)

Brand/Generic					
Dose					
Frequency					
Route					
Classification					
Mechanism of Action					
Reason Client Taking					

Contraindications (2)					
Side Effects/Adverse Reactions (2)					

Medications Reference (APA):

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** A&0 x 4 **Orientation:** Oriented to person, time, place, and current events. **Distress:** Acute distress (noted by wincing) when moving client's foot. **Overall appearance:** well-groomed and put together.	
INTEGUMENTARY: **Skin color:** White, normal for race. **Character:** Appears hydrated, clean, well groomed. +1 pitting edema on both ankles. Non-pitting edema on hands and fingers. **Temperature:** Warm **Turgor:** Rapid recoil. **Rashes:** None noted. **Bruises**: Small bruises on left and right arms. Purple in color. **Wounds:** Wound on right arm. Scabbed and approximately 3 inches long.	

Braden Score: 21 **Drains present: Y☐ N ☒** **Type:**	
HEENT: **Head/Neck:** Head and neck symmetrical. No lesions or rashes noted. Trachea midline. Thyroid is not palpable. **Ears:** Auricle was pink, moist, with no rashes or lesions noted. **Eyes:** Client uses reading glasses. PERRL. **Nose:** Septum midline. No drainage or bleeding. Turbinates' in nasal passage. **Teeth:** Client has all teeth	.
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:**	.
RESPIRATORY: **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character**	.
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:	
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☐** **Dialysis: Y ☐ N ☐** **Inspection of genitals:** **Catheter: Y ☐ N ☐** **Type:** **Size:**	
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**☐	.
NEUROLOGICAL: **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	.
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):**	.

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen

0720	**66**	**114/64**	**14**	**97.4**	**97**

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0720	**Numeric 0-10**	**Right leg**	**3**	**Sharp, sudden pain.**	**Patient is given Tylenol as ordered by physician.**
0720	**Numeric 0-10**	**Right leg**	**7/8 (with movement)**	**Sharp, sudden pain.**	**Patient is given Tylenol as ordered by physician.**

Intake and Output (2 points)

Intake (in mL)	Output (in mL)

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" components	• Explain why the nursing diagnosis was chosen		• How did the patient/family respond to the nurse's actions? • Client response,

			status of goals and outcomes, modifications to plan.
1. Chronic pain related to arthritic gout joint changes as evidence by a pain of 7/8 on a scale of 10 with movement.	**Patient rated pain a 7/8 on a scale of 10 with movement. Patient also winced when area moved.**	**1. NSAID pain reliever as order by physician.** **2. Patient education related to the importance of pain management.**	**Patient implemented pain management by getting ahead of the pain and applying the patient education. A patient goal is being met by successfully having two pain free days.**
2. Decreased mobility related to chronic pain as evidence by client subjective data.	**Patient noted he keeps off his feet to stay out of pain from arthritic gout.**	**1. Active/passive range of motion (ROM) exercises to prevent muscle weakness due to inactivity.** **2. Patient education of importance to stay active and keep moving to promote muscle strength.**	**Patient applied the patient education and now understands the importance of promoting muscle strength with active/passive ROM. A patient goal is being met by completing ROM twice daily.**

Other References (APA):

Swearingen, P. L. (2019). *All-in-one care planning: Medical-surgical, pediatric, maternity, and psychiatric nursing care plans*. St. Louis, MO: Mosby/Elsevier.

Concept Map (20 Points):

Subjective Data

-Patient states, “I got gout in my knees, the back of my right leg and in my left ankle.”
-Patient reported pain without movement as a 3 on a scale of 10 and with movement pain was stated as a 7/8 on a scale of 10.
-Patient reports pain with ambulation and staying off his feet is a relieving factor.
-Patient reports pain related to gout started 6-12 months ago.
-Pain is sharp and throbbing.

Nursing Diagnosis/Outcomes

-Chronic pain: Patient can have two consecutive pain free days before discharge. Goals for patient were set and met.

-Decreased mobility: Patient is doing active range of motion and ambulating twice a day before discharge. Goals for patient were set and met.

Objective Data

-On the blood lab patient has increased WBC, Neutrophils, lymphocytes, uric acid, glucose, creatine, calcium, EFGR, and Anion gap due to an increase of inflammation and the chronic kidney disease.
-Patient has low RBC, Hgb, Hct, due to anemia related to patient’s chronic kidney disease.
-Patient winced while moving left leg indicating distress.
- +1 pitting edema on both ankles. Edema in hands and fingers, non-pitting.

Patient Information

Patient is 76-year-old male with past medical history of chronic kidney disease and gout. Patient has a surgical history of a kidney removal. He was admitted for complications due to arthritic gout.

Nursing Interventions

-Patient education of pain management.
-Use of NSAID’s as ordered by physician to manage pain.
-Patient education of importance of preserving muscle strength.
-Implementation of active/passive ROM.