# N321 Care Plan 2

Lakeview College of Nursing

Happy Kalavadia

## Demographics (3 points)

| Date of Admission | Patient Initials | Age | Gender |
|---|---|---|---|
| 2/17/2021 | PW | 67 | F |
| **Race/Ethnicity** | **Occupation** | **Marital Status** | **Allergies** |
| Caucasian | Retired ( from the patient) | Not married | None |
| **Code Status** | **Height** | **Weight** | |
| Full | 5 feet | 57.7 kg | |

## Medical History (5 Points)

**Past Medical History:**

- End-Stage renal disease
- Anemia of chronic kidney disease
- Insulin-dependent diabetes mellitus type 2
- Hypertension

**Past Surgical History:** None

**Family History:**

The patient's father died due to gastric cancer.

The patient's mother is 93 years old and healthy.

**Social History (tobacco/alcohol/drugs):**

- The patient stated that she did abuse drugs and alcohol. When asked to the patient which drug and how often, she replied," I am not comfortable sharing that with you". She further mentioned that she did abused alcohol almost every day and was a chronic alcoholic for many years. The patient stated that she is clean for two years and does not consume alcohol**.**

**Assistive Devices:** None

**Living Situation**: Living Alone

**Education Level:** High school graduate ( Obtained from the patient)

## Admission Assessment

**Chief Complaint (2 points):**

- The patient did not have any chief complaint but was admitted to the hospital due to dialysis blood turning yellow which was witnessed by a nurse working in the dialysis unit. Patient stated, " I have cough since many days, and I am taking cough suppressant".

**History of present Illness (10 points):**.

On 2/16 patient was undergoing dialysis at OSF in Danville, IL. The nurse noticed that dialysis blood became yellow and hence the patient was transferred to the Med Surg floor. The patient did have mild scleral icterus but did not have any pain or tenderness. Patient stated, " I do not have pain in my body, but I feel lethargic and have urge to vomit ". She mentioned that she feels fatigued and spends most of the time sleeping in her home. She further stated," I have been abusing alcohol since many years and I used to drink almost daily but I have stopped drinking and it has been two years". Her provider ordered various lab tests to rule out HCC and a liver biopsy was scheduled on 2/ 19. The patient stated that she does not have pain and has a lack of appetite which resulted in 20 pounds weight loss in few months.

## Primary Diagnosis

**Primary Diagnosis on Admission (2 points):**

- To rule out Hepatocellular carcinoma(HCC).

**Secondary Diagnosis (if applicable):** None

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

Hepatocellular carcinoma( HCC) is the leading cause of cancer mortality and its incidence has increased worldwide (Capriotti & Frizzell, 2016, p. 448). The liver is the prime organ responsible for metabolizing fats, protein, and carbohydrates (Van Leeuwen & Bladh, 2017, p. 388). Also, the liver metabolizes toxic wastes and maintains blood glucose levels, and regulates blood clotting (Capriotti & Frizzell, 2016). HCC results from various underlying etiology like chronic viral infection, HCV infection, chronic alcoholism, nonalcoholic steatohepatitis, inflammation, necrosis, fibrosis, and stricture (Van Leeuwen & Bladh, 2017).

The pathophysiology of HCC is a multifactorial event. The patient did have mild scleral icterus on physical examination but did not have any symptoms of pain or tenderness in the abdomen. The prime cause of HCC is mediated by liver injury through liver inflammation and fibrosis which leads to disturbed liver architecture (Van Leeuwen & Bladh, 2017). The patient did mention that she abused alcohol for years and this could be the reason that her liver function is impaired. Her provider ordered a liver biopsy to rule out metastatic HCC. Pure alcohol secretes toxic metabolites and free radicals which influences oxidative stress and there is constant activation of inflammatory pathways which leads to disruption of the liver's function and cause cirrhosis of the liver (Van Leeuwen & Bladh, 2017). Epigenetic alteration by inflammatory cascade is a possible mechanism of the development of HCC (Capriotti & Frizzell, 2016). Alcohol causes altered acetylation which plays a role in tumorigenesis( Van Leeuwen & Bladh, 2017). Also, alcohol impacts lipid metabolism leading to the fatty liver which is a predisposing factor of HCC. Alcohol also disrupts the normal metabolism of the liver, hypomethylation, and causes hypoxia which causes the normal cell of the liver to die and induces the development of malignant cells (Capriotti & Frizzell, 2016). Alcohol inactivates the p53

tumor suppression gene resulting in the activation of tumor-producing cells (Van Leeuwen & Bladh, 2017).

The sign and symptoms of HCC are fatigue, cachexia which is weight loss related to cancer, and elevation of lymphocytes especially WBC (Capriotti & Frizzell, 2016). The patient mentioned that she has fatigue and weakness for many months, and she spends most of the time sleeping at her home. Her provider ordered a CT abdomen and pelvis which revealed multiple liver lesions in both lobes of the liver. Also, CT showed severe calcification of superior mesenteric arteries due to ongoing chronic kidney disease in the patient. The patient also had hilar and paratracheal lymphadenopathy in the CT chest which could be due to potential metastasis due to HCC. Also, the CT chest revealed pulmonary nodules in the right apex in both bases with a diameter of 9mm. This could lead to suspicion of metastatic disease in both lungs. Hence, the provider ordered a liver biopsy on 2/19 to rule out metastatic liver disease, and her plan of care will be based on the results of the liver biopsy.

Clinically, the patient does have mild scleral icterus and have elevated bilirubin levels in blood. Patient also had elevated alkaline phosphatase levels and ALT which is highly suggestive of malignancy due to disturbed liver function. She complains of lethargy and fatigue and she states," My mood is not good, and I do not feel good". Her blood glucose is elevated as she has type 2 diabetes mellitus and could due to impaired metabolism by the liver. The patient has elevated BUN and creatinine levels due to chronic kidney disease. Her systolic blood pressure is 155 and she takes amlodipine for her hypertension.

The treatment of this patient will be based on the results of her liver biopsy. If the carcinoma is confined to the liver, surgical resection and chemoablation is an option. But an extensive spread of carcinoma beyond the liver borders would require liver transplantation.

Chemotherapy is not an option for HCC because the cancer cells can regrow, and hence liver transplantation is usually done for patients diagnosed with HCC with extensive metastasis. (Van Leeuwen & Bladh, 2017).

**Pathophysiology References (2) (APA):**

Capriotti, T., & Frizzell, J. P. (2016). Pathophysiology Introductory Concepts and Clinical Perspectives. Philadelphia, PA: F.A. Davis Company.

Van Leeuwen, A. M., & Bladh, M. L. (2017). Davi's Comprehensive Handbook of Laboratory and Diagnostic Tests with Nursing Implications (7 ed.). Philadelphia, PA: F.A. Davis Company.

## 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** | 3.80-5.41 | **N/A** | **3.75** | The patient had low RBC due to chronic kidney disease( End-Stage renal disease)as the kidneys are unable to produce erythropoietin ( EPO) (Capriotti & Frizzell, 2016, pg.180). |
| **Hgb** | 11.3-15.2 | **N/A** | **10.7** | The patient has low hemoglobin as erythrogenesis is impaired in patients with renal failure due to inadequate production of EPO(Capriotti & Frizzell, 2016, pg.140). |
| **Hct** | 33.2-45.3% | **N/A** | **34.3** | - |
| **Platelets** | 149-493 K | **N/A** | **426 K** | - |
| **WBC** | 4-11.7 K | **N/A** | **10.80** | - |
| **Neutrophils** | 45.3-79 | **N/A** | **88** | In patients with underlying possible hepatocellular carcinoma, there is the production of granulocyte stimulating |

| | | | | |
|---|---|---|---|---|
| | | | | growth factor which stimulates the new production of neutrophils (Capriotti & Frizzell, 2016, pg.250) |
| **Lymphocytes** | 11.8-45.9 | **N/A** | **10.8** | - |
| **Monocytes** | 4.4-12.0 | **N/A** | **6.0** | - |
| **Eosinophils** | 0.0-6.3 | **N/A** | **3.0** | - |
| **Bands** | N/A | **N/A** | **-** | |

**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 | **N/A** | **134** | In chronic kidney disease, reabsorption of sodium is impaired because kidneys do not reabsorb sodium and its excreted in the urine. ( Capriotti & Frizzell, 2016, pg.190). |
| **K+** | 3.5-5.1 | **N/A** | **4.7** | - |
| **Cl-** | 98-107 | **N/A** | **95** | |
| **CO2** | 22-29 | **N/A** | 33 | Neoplastic cells cause too much CO2 in the blood and hence there is impaired excretion of CO2 in this patient( Although cancer has not been ruled out there is the possibility that this patient might have HCC). **(** Capriotti & Frizzell, 2016, pg.210). |
| **Glucose** | 70-99 | **N/A** | 177 | In type 2 diabetes mellitus, there is an elevation of blood glucose. ( Capriotti & Frizzell, 2016, pg. 160). Another possible mechanism is due to impaired liver function , glucose is not metabolized ( Capriotti & Frizzell, 2016, pg. 150). |
| **BUN** | 6-20 | **N/A** | **26** | In the chronic kidney disease ,BUN is elevated due to impaired excretion ability of BUN as the kidneys are not normally functioning **(** Capriotti & Frizzell, 2016, pg.220). |

| | | | | |
|---|---|---|---|---|
| **Creatinine** | 0.5-0.9 | **N/A** | **2.82** | Chronic kidney disease causes a buildup of creatinine as it is not normally excreted from the body. ( Capriotti & Frizzell, 2016, pg.167). The patient has had chronic kidney disease for many years. |
| **Albumin** | 3.5-5.2 | **N/A** | **2.6** | - |
| **Calcium** | 8.6-10.4 | **N/A** | **8.9** | - |
| **Mag** | 1.6-2.4 | **N/A** | **2.1** | - |
| **Phosphate** | N/A | **N/A** | **N/A** | - |
| **Bilirubin** | 0.0-1.2 | **N/A** | **2.1** | The patient had jaundice and the bilirubin levels are elevated in jaundice **(** Capriotti & Frizzell, 2016, pg.170). |
| **Alk Phos** | 35-105 | **N/A** | **352** | High alkaline phosphatase levels are common in patients with metastatic liver carcinoma due to impaired metabolism of alk phos by liver. ( Capriotti & Frizzell, 2016). This patient had multiple liver lesions and the provider had ordered a liver biopsy to rule out metastatic liver carcinoma. **(**Capriotti & Frizzell, 2016, pg. 210). |
| **AST** | 0-32 | **N/A** | **20** | - |
| **ALT** | 0-33 | **N/A** | **64** | In patients with underlying liver cancer, there is an elevation of ALT in blood as the liver cannot metabolize it and it is accumulated in the blood. The patient's CT abdomen showed multiple liver lesions and mild scleral icterus (Capriotti & Frizzell, 2016, pg.136). |
| **Amylase** | 30-110 | **N/A** | **31** | - |
| **Lipase** | 24-251 | **N/A** | **20.2** | - |
| **Lactic Acid** | N/A | **N/A** | **N/A-** | |

| | |
|---|---|
| | . |
| | . |

**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** | **N/A** | **N/A** | **N/A** | **-** |
| **PT** | **N/A** | **N/A** | **N/A** | **-** |
| **PTT** | 25-35 | **N/A** | 30 | **-** |
| **D-Dimer** | **N/A** | **N/A** | **N/A** | **-** |
| **BNP** | **N/A** | **N/A** | **N/A** | **-** |
| **HDL** | **N/A** | **N/A** | **N/A** | **-** |
| **LDL** | **N/A** | **N/A** | **N/A** | **-** |
| **Cholesterol** | **N/A** | **N/A** | **N/A** | |
| **Triglycerides** | **N/A** | **N/A** | **N/A** | |
| **Hgb A1c** | **4%- 5.6%** | | **7%** | In patients with uncontrolled blood sugar levels, there is an elevation of HBA1c. It is a measurement of three-month glucose levels in a patient with diabetes. (Capriotti & Frizzell, 2016, pg.134). Patient has chronic DM type 2 since many years. |
| **TSH** | **N/A** | **N/A** | **N/A** | |

**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** | Yellow, clear | **N/A** | **Yellow/turbid** | The patient has chronic kidney disease in which there is impaired excretion of urine resulting in urine that is more turbid. (Capriotti & Frizzell, 2016, pg.120). |
| **pH** | 5.0-8.0 | **N/A** | **7.0** | - |
| **Specific Gravity** | 1.005-1.034 | **N/A** | **1.012** | - |
| **Glucose** | Negative-normal | **N/A** | **Negative** | - |
| **Protein** | Negative-Normal | **N/A** | **Negative** | - |
| **Ketones** | Negative | **N/A** | **Negative** | - |
| **WBC** | <5 | **N/A** | **Packed** | Packed WBC is a sign of undergoing infection and inflammation. The patient has multiple chronic diseases as well as potential liver cancer which results in high WBC. (Van Leeuwen & Bladh, 2017, p. 1583) |
| **RBC** | 0-3 | **N/A** | **N/A** | - |
| **Leukoesterase** | Negative | **N/A** | **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** | **N/A** | **N/A** | **N/A** | Provider ordered urine culture, but the results are pending. |
| **Blood Culture** | **N/A** | **N/A** | **N/A** | - |
| **Sputum Culture** | **N/A** | **N/A** | **N/A** | - |
| **Stool Culture** | **N/A** | **N/A** | **N/A** | - |

**Lab Correlations Reference (APA):**

Capriotti, T., & Frizzell, J. P. (2016). *Pathophysiology Introductory Concepts and Clinical Perspectives*. Philadelphia, PA: F.A. Davis Company.

Van Leeuwen, A. M., & Bladh, M. L. (2017). Davi's Comprehensive Handbook of Laboratory and Diagnostic Tests with Nursing Implications (7 ed.). Philadelphia, PA: F.A. Davis Company.Diagnostic Imaging

**All Other Diagnostic Tests (5 points):**

- **CT abdomen pelvis w/o contrast**

  This test was ordered by her provider to rule out HCC (Van Leeuwen & Bladh, 2017, p. 481 )despite the patient did not present with any pain or tenderness in abdomen. Per radiologist notes, there was extensive calcification of both common femoral arteries and atherosclerosis of superior mesenteric and splenic artery. Her liver revealed extensive diffuse multiple hypodense lesions in right and left lobe.

- **XR chest single view-**

  As per the radiologist's note, there is cardiomegaly and no consolidation or pneumothorax noted. Chest x-ray was ordered to rule out any metastatic lesions from liver cancer (Van Leeuwen & Bladh, 2017, p. 440)

- **CT chest w/o contrast:**

  The provider ordered this test as a confirmatory test after a chest x-ray to rule out metastatic liver disease( Van Leeuwen & Bladh, 2017, p. 481). As per radiologist's notes, pulmonary nodule noted in right apex in both bases, suspicious for metastatic disease in

both lungs. Also, a small enlarged LN was noted in the left hilum and paratracheal area. Chest x ray also showed cardiomegaly as well.

**Diagnostic Test Correlation (5 points):**

Chest X-ray was ordered to rule out metastatic disease and it is quicker than CT chest.

CT chest was then ordered after viewing the results of the chest x-ray for further confirmation of metastatic disease from HCC.

CT abdomen pelvis was ordered to rule out metastatic HCC and chronic kidney disease .

**Diagnostic Test Reference (APA):**

Van Leeuwen, A. M., & Bladh, M. L. (2017). Davi's Comprehensive Handbook of Laboratory and Diagnostic Tests with Nursing Implications (7 ed.). Philadelphia, PA: F.A. Davis Company.

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

**Home Medications (5 required)**

| **Brand/Generic** | Benzonatate/ Tessalon<br><br>Vallerand, Sanoski, & Deglin, 2017, p. 120) | Lantus Solostar/ Insulin glargine<br><br>(Vallerand, Sanoski, & Deglin, 2017, p. 180) | | | |
|---|---|---|---|---|---|
| **Dose** | 100mg | 15 unit/1ml | | | |
| **Frequency** | Once after dinner | Inject 15 unit at bedtime | | | |
| **Route** | Oral | Subcutaneous | | | |
| **Classification** | Antitussive | Insulin | | | |
| **Mechanism of Action** | It inhibits cough reflex arc and inhibits cough reflex in the brainstem. | It lowers blood glucose by pushing glucose into cells. | | | |
| **Reason Client Taking** | The patient stated that she had some cough for many days and hence was prescribed this medication | The patient has chronic type 2 diabetes mellitus. | | | |
| **Contraindications (2)** | Emphysema<br>The client who is a smoker | Hypoglycemia<br>Sensitivity to insulin | | | |
| **Side Effects/Adverse Reactions (2)** | Drowsiness<br>Shortness of breath | Sweating<br>Swelling of face | | | |
| **Nursing Considerations (2)** | Take the medication after dinner and avoid it during the daytime to prevent drowsiness. | Watch for symptoms of hypoglycemia like dizziness.<br><br>Rotate the site | | | |

| | | | | | |
|---|---|---|---|---|---|
| | Do not smoke while taking this medication as it reduces the effectiveness of it. | when ad mistering insulin to prevent bruising. | | | |

**Hospital Medications (5 required)**

| **Brand/Generic** | Cephalexin/ Keflex<br><br>(Vallerand, Sanoski, & Deglin, 2017, p. 120) | Ondansetron/ Zofran<br><br>(Vallerand, Sanoski, & Deglin, 2017, p. 120) | Amlodipine/ (Norvasc ( Vallerand, Sanoski, & Deglin, 2017, p. 120) | Heparin/ Porcine ( Vallerand, Sanoski, & Deglin, 2017, p. 120) | |
|---|---|---|---|---|---|
| **Dose** | 500 mg | 4mg | 5 mg | 5000 units | |
| **Frequency** | 2 Daily | Once daily | Once daily | Every 12 hours | |
| **Route** | Oral | Oral | Oral | Oral | |
| **Classification** | Cephalosporins | Antiemetics | Calcium channel blockers | Anticoagulant | |
| **Mechanism of Action** | It binds and inactivates penicillin-binding protein located on the inner membrane of the bacterial cell wall. | It inhibits selective 5HT3 inhibitor which prevents nausea and vomiting. | It works by inhibiting voltage-dependent calcium channels and thus inhibiting the influx of calcium. | It binds to the enzyme antithrombin III and reduces the formation of clots. | |

| | | | | | |
|---|---|---|---|---|---|
| **Reason Client Taking** | Due to elevation of packed WBC which indicates a bacterial infection. | The patient had nausea since many days. | This medication reduces hypertension and thus prevents diabetic nephropathy. | Due to risk for hospital related DVT as client usually spends time sleeping in the bed. | |
| **Contraindications (2)** | Renal Failure<br>Bone marrow transplant | Serotonin Syndrome<br>Neuroleptic malignant syndrome | Aortic valve stenosis<br><br>Low blood pressure | Bleeding diathesis<br><br>Hypersensitivity | |
| **Side Effects/Adverse Reactions (2)** | Nausea<br>Diarrhea | Headache<br>Dizziness | Flushing<br><br>Constipation | Bleeding<br>Rash | |
| **Nursing Considerations (2)** | Take it with food to prevent GI upset.<br><br>Do not sleep for 15 minutes( maintain upright posture) after taking the medication to prevent reflux. | Monitor the patient for serotonin syndrome.<br><br>Monitor fluid and electrolytes status | Teach the client to take more fiber in the diet when taking this medication.<br><br>Monitor blood pressure | Use a soft-bristle toothbrush to prevent bleeding.<br><br>Avoid contact sports | |

**Medications Reference (APA):**

Vallerand, A. H., Sanoski, C. A., & Deglin, J. H. (2017). Davis's Drug Guide for Nurses (15 ed.). Philadelphia, PA: F.A. Davis Company.

## Assessment

**Physical Exam (18 points)**

| | |
|---|---|
| **GENERAL (1 point):**<br>**Alertness:**<br>**Orientation:**<br>**Distress:**<br>**Overall appearance:** | The patient is alert, awake, and oriented to person, time, and place. The patient is not in distress, but she stated that she lacks energy and does feel extremely weak and lethargic. |
| **INTEGUMENTARY (2 points):**<br>**Skin color:**<br>**Character:**<br>**Temperature:**<br>**Turgor:**<br>**Rashes:**<br>**Bruises:**<br>**Wounds:** .<br>**Braden Score:** 16<br>**Drains present: Y☐ N ☐**<br>**Type:** | The patient has mild scleral icterus on physical examination. The patient's skin color is pale and does not have a yellow tinge to her skin. No bruising or any kind of rash is present. Skin turgor is normal, and no wounds are present on the patient's skin. Skin temperature is warm to the touch and her skin condition is dry and pale. |
| **HEENT (1 point):**<br>**Head/Neck:**<br>**Ears:**<br>**Eyes:**<br>**Nose:**<br>**Teeth:** | The Head is midline with no deviations. Hair is sparse, especially on the frontal side. Ears show no abnormal drainage, tympanic membrane visible, pearly grey. PERRLA is noted. The patient uses glasses regularly. The nose shows no deviated septum, turbinates' equal bilaterally. The oral mucosa is pink and moist with no notable abnormalities. Dentition is good and teeth are yellow. |
| **CARDIOVASCULAR (2 points):**<br>**Heart sounds:**<br>**S1, S2, S3, S4, murmur etc.**<br>**Cardiac rhythm (if applicable):**<br>**Peripheral Pulses:**<br>**Capillary refill:**<br>**Neck Vein Distention: Y ☐ N ☐**<br>**Edema Y ☐ N ☐**<br>**Location of Edema:** | . The patient was noted to be in normal sinus rhythm on admission. Heart sound auscultated x5. S1, S2 heart sounds noted. Radial and pedal pulses were assessed. Pulses graded 2+ and present bilaterally. Capillary refill average at <2 seconds. The patient shows no signs of edema. Negative for neck vein distention. |
| **RESPIRATORY (2 points):** | |

| | |
|---|---|
| **Accessory muscle use: Y☐ N ☐**<br>**Breath Sounds: Location, character** | No accessory muscle use when breathing. Trachea midline. No deviations. The patient is denying current shortness of breath. The patient was short of breath on admission. The patient presents with a non-productive cough. Anterior and posterior lung sounds auscultated. Lung sounds are regular bilaterally. Noted bilaterally Patient currently breathing room air. The patient denies the use of oxygen at home. |
| **GASTROINTESTINAL (2 points):**<br>Diet at home: Patient mentioned that she does not eat healthy and mostly eats frozen foods.<br>**Current Diet: Renal diet**<br>**Height: 5 feet**<br>**Weight: 57.7 kg**<br>**Auscultation Bowel sounds:**<br>**Last BM: Before two days**<br>**Palpation: Pain, Mass etc.:**<br>**Inspection:**<br>**Distention:**<br>**Incisions:**<br>**Scars:**<br>**Drains:**<br>**Wounds:**<br>**Ostomy: Y ☐ N ☐**<br>**Nasogastric: Y ☐ N ☐**<br>**Size:**<br>**Feeding tubes/PEG tube Y ☐ N ☐**<br>**Type:** | The patient stated that she lost 30 pounds for few months and she feels fatigued most of the time. Auscultation of the abdomen reveals regular sounds in all four quadrants. On inspection, the abdomen is a little distended. The patient denies any pain or tenderness while palpating the abdomen. . No masses present. No ostomy, nasogastric tubes, PEG tubes. No drains. The patient mentioned that her bowel movement is not regular and has constipation. |
| **GENITOURINARY (2 Points):**<br>**Color:**<br>**Character:**<br>**Quantity of urine:**<br>**Pain with urination: Y ☐ N ☐**<br>**Dialysis: Y ☒ N ☐**<br>**Inspection of genitals:**<br>**Catheter: Y ☐ N ☐**<br>**Type:**<br>**Size:** | The patient's urine has yellow frothy color. There is no evidence of bleeding in her urine and her quantity of urine is normal. The patient does not have pain with urination. No catheter is present, and the patient mentioned that her voiding is normal without bleeding or hesitancy. |
| **MUSCULOSKELETAL (2 points):**<br>**Neurovascular status:**<br>**ROM:** | The patient's neurovascular status is normal, and she is oriented to person, place, and time. Her range of motion is equal in all four extremities. |

| | |
|---|---|
| **Supportive devices:**<br>**Strength:**<br>**ADL Assistance: Y☐ N ☐**<br>**Fall Risk: Y ☐ N☐**<br>**Fall Score**: 20<br>**Activity/Mobility Status:**<br>**Independent (up ad lib)** ☐<br>**Needs assistance with equipment** ☐<br>**Needs support to stand and walk**☐ | She does not use supportive devices and has equal strength in all extremities. She is independent in walking, but she mentioned that she does not like to walk because she feels weak. |
| **NEUROLOGICAL (2 points):**<br>**MAEW: Y ☒ N☐**<br>**PERLA: Y ☐ N☐**<br>**Strength Equal: Y ☐ N ☐ if no -**<br>**Legs ☐ Arms ☐ Both ☐**<br>**Orientation:**<br>**Mental Status:**<br>**Speech:**<br>**Sensory:**<br>**LOC:** | The patient is awake in bed but drowsy and fatigued. She is A&O x4. The patient appears to be lethargic and annoyed. The patient speaks English well and at a normal pace. Patient MAEW for current age and condition. The patient's strength is bilaterally equal. The patient shows no signs of neurological damage or deficit. Her speech is clearly understandable. The patient's sensory function is intact with no loss of consciousness. |
| **PSYCHOSOCIAL/CULTURAL (2 points):**<br>**Coping method(s):**<br>**Developmental level:**<br>**Religion & what it means to pt.:**<br>**Personal/Family Data (Think about home environment, family structure, and available family support):** | The patient stated that she lives alone and her family lives in Texas. She mentioned that she is tired mentally because of her chronic illness and feeling of impending doom. ( patient stated " I sometimes lose hope and feel helpless"). The patient is not married but mentioned that her support system was his few friends who live in Danville. The patient mentioned that she is catholic by religion. |

**Vital Signs, 2 sets (5 points)**

| Time | Pulse | B/P | Resp Rate | Temp | Oxygen |
|---|---|---|---|---|---|
| **15:00** | **86** | **140/80** | **22** | **99.6** | **94 % room air** |
| **16:00** | **80** | **145/85** | **16** | **98.6** | **95% room air** |

**Pain Assessment, 2 sets (2 points)**

| Time | Scale | Location | Severity | Characteristics | Interventions |
|---|---|---|---|---|---|
| **15:00** | Numeric Scale<br><br>0/10 | Patient denies pain | Patient denies pain | Patient denies pain | No interventions implemented |
| **15:40** | Numeric Scale<br><br>0/10 | Patient denies pain | Patient denies pain | Patient denies pain | No interventions implemented |

**IV Assessment (2 Points)**

| IV Assessment | Fluid Type/Rate or Saline Lock |
|---|---|
| **Size of IV:** 20 gauge<br>**Location of IV:** Left arm<br>**Date on IV:** 2/17/2021<br>**Patency of IV**: Patent<br>**Signs of erythema, drainage, etc.:** None<br>**IV dressing assessment:** Clean, dry and intact | None |

**Intake and Output (2 points)**

| Intake (in mL) | Output (in mL) |
|---|---|
| 1090 ml ( strawberry flavored popsicle, 300<br><br>ml water, jello, and broth ) | 250ml |

**Nursing Care**

**Summary of Care (2 points)**

**Overview of care:**

The patient presented to the Med Surg floor because her dialysis blood turned yellow and her labs were abnormal. Her CT abdomen pelvis showed multiple liver lesions and calcification of the abdominal aorta. Her provider ordered a liver biopsy on 2/18 to rule metastatic HCC. Her blood pressure is high and the provider prescribed amlodipine during her hospital stay. He also prescribed ondansetron and cephalexin for her nausea and bacterial infection. Provider waiting results for a urine culture to rule out infection.

**Procedures/testing done:**

Chest x-ray showed cardiomegaly and pulmonary nodules in the right apex.

CT chest was done to confirm pulmonary nodules and it showed enlarged LN noted in the left hilum.

CT abdomen and pelvis showed extensive diffuse multiple hypodense lesions noted in the left and right lobe.

**Complaints/Issues:**

The patient felt weak and lethargic due to cachexia related to potential cancer. She stated," I spend most of the time sleeping at my home". The patient did have mild scleral icterus. Her blood pressure and labs were abnormal. Her provider ordered a liver biopsy to rule out potential HCC because her CT abdomen revealed multiple liver lesions on both lobes of the liver.

**Vital signs (stable/unstable):**

Blood pressure is unstable and must be monitored every 4 hours. ( mentioned in the chart).

**Tolerating diet, activity, etc.:**

The patient;s diet is less than before but she ate her meal regularly while in hospital. Her activity is less mobile, but she can ambulate independently.

**Physician notifications:**

Notify the physician if blood pressure is more than 160 systolic. Also, the provider ordered a liver biopsy and will decide her treatment as well as discharge after receiving her liver biopsy results.

**Future plans for patient:**

Plans for the patient is to continue her amlodipine and monitor her labs. Liver biopsy will further provide more specific direction for the provider about treatment or refer her to an oncologist.

**Discharge Planning (2 points)**

**Discharge location: Danville, IL**

Home health needs (if applicable): None. Monitor blood pressure ( patient mentioned that she measures her blood pressure regularly at home).

**Equipment needs (if applicable):** Sphygmomanometer

**Follow up plan:**

Currently, the follow-up plan is on hold until the patient undergoes a liver biopsy. But if the patient notices any bleeding or symptoms of jaundice, the patient is advised to seek medical care immediately.

**Education needs:**

Monitor blood pressure regularly at home.

Continue renal diet and low sodium diet.

Watch for symptoms of jaundice and seek medical care immediately.

Maintain a regular diet with regular intervals.( Patient stated, " My diet at home is very irregular and unhealthy".

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

| **Nursing Diagnosis**<br>• Include full nursing diagnosis with "related to" and "as evidenced by" components | **Rational**<br>• Explain why the nursing diagnosis was chosen | **Intervention (2 per dx)** | **Evaluation**<br>• How did the patient/family respond to the nurse's actions?<br>• Client response, the status of goals and outcomes, modifications to plan. |
|---|---|---|---|
| 1. Rsk for impaired liver function related to hyperbilirubinemia and evidenced by mild scleral icterus. (Swearingen, 2016, p. 112) | This is in relation to elevated bilirubin in the blood and multiple liver lesion in the CT abdomen. There is evidence of mild scleral icterus upon physical examination. | **1.**Monitor skin integrity every 4 hours<br><br>2.Maintain adequate fluid intake | The patient agrees to consume more fluids and electrolytes. She further states" I will watch for yellowing of my skin ". The patient agrees to the interventions and her plan of care. |
| 1. Ineffective coping related to patient's low self-esteem due to chronic illness and evidenced by patient's excessive sleeping during | This is in relation to the patient's low self-esteem and evidenced by the patient's excessive sleeping pattern | **1.** Help find a support group for the patient in her local area<br><br>**2.**Engage in some activities like group therapy sessions or | The patient stated," My mood has been not good, and I am tired of my chronic illness' Patient agrees to seek a pastor visit and agreed to join a support group and start painting again. |

| | | | |
|---|---|---|---|
| the hospital stay and her impaired mood.<br><br>(Swearingen, 2016, p. 110) | during the hospital stay. The patient stated " I like to sleep most of the time" | pastor visits in hospital to alter her mood. Also, motivate her hobby of painting**.** | |
| 1. Impaired renal tissue perfusion as related to chronic kidney failure and evidenced by calcification of renal arteries and glomerulosclerosis.<br><br>(Swearingen, 2016, p. 110) | This is in relation to chronic renal failure and patients with end-stage renal disease. The patient also undergoes dialysis three times a week. | 1. To continue dialysis three times a week.<br><br>**2** Do BUN and creatinine levels twice a month to evaluate kidney function. | The patient's follow plan is to come for dialysis three times a week and the goal is to keep BUN and creatinine level under control by taking medications regularly. |

**Other References (APA):**

Swearingen, P. L. (2016). All-In-One Nursing Care Planning Resource (4 ed.). St. Louis, Missouri: ELSEVIER

**Concept Map (20 Points):**

**Subjective data**

Patient complaints of feeling tired and lethargic and stated that" I sleep most of the time at home"
Patient has constipation and her bowel movement are irregular.
She also has nausea and vomiting like symptoms.
She mentioned that her mood is not good and stated," Life is like a punishment" and went back to sleep.

**Nursing Diagnosis/Outcomes**

Risk for impaired liver function
Outcome- Provider ordered liver biopsy to rule out metastatic liver cancer.
Ineffective coping due to
Outcome- Patient agreed to join support group and pastor visit .In addition, patient mentioned that she will start painting.

- Impaired renal tissue perfusion

Outcome- Hemodialysis three times a week and monitor BUN and creatinine levels.

**Objective Data**

Patient has mild scleral icterus .
CT chest shows hilar lymphadenopathy.
CT abdomen shows multiple hypodense lesions on right and left lobes of liver.
CT abdomen pelvis shows severe atherosclerosis of abdominal aorta.
Her blood pressure is 155/85
Fall and Braden score is 20 and 16 respectively.
Urine output 250 ml
Bilirubin is 2.1

**Patient Information**

Patient is 67-year-old female with mild scleral icterus and presents to med surg floor because of dialysis blood turning yellow and elevated bilirubin , BUN and creatinine levels in blood. Patient has a history of abusing alcohol since many years.

**Nursing Interventions**

Monitor for blood pressure every 4 hours.
Elevate the head of bed to prevent nausea.
Monitor for bleeding.
Schedule group therapy to help improve patient's mood.
Monitor skin integrity every 4 hours.
Establish therapeutic relationship with the patient.
Showing empathy to her and spend some time with her talking.
Maintain adequate fluid intake.
Monitor BUN and creatinine levels.
Check for adequate urinary output
Continue dialysis three times a week.
Develop good listening skills.
Educate the patient to administer heparin at different places to prevent bruises.