

**N311 Care Plan 2**

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N311: Foundations of Professional Practice

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**Demographics (5 points)**

Date of Admission <b>9/24</b>	Client Initials <b>AM</b>	Age <b>47</b>	Gender <b>F</b>
Race/Ethnicity <b>White/ non-Hispanic</b>	Occupation <b>n/a</b>	Marital Status <b>Married</b>	Allergies <b>None</b>
Code Status <b>Full Code</b>	Height <b>5'4 (162.6cm)</b>	Weight <b>126lb 12.2 oz (57.5 kg)</b>	

**Medical History (5 Points)**

**Past Medical History:** hypertension, unspecified cirrhosis of liver

**Past Surgical History:**

- IR tunneled dialysis catheter insertion (7/22)
- Upper gastrointestinal endoscopy (9/3), (7/18), (6/29), (5/29), (2/10)

**Family History:**

- n/a

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

- tobacco- daily → cigarettes, 0.75 packs, 15 yrs
- No vaping or smokeless tobacco
- Alcohol – weekly → vodka/beer, 8-10 per week, 8-10 cans per week

**Admission Assessment****Chief Complaint (2 points):**

- Not feeling well, generalized abdominal distention and pain, nausea/vomiting, generalized weakness, shaking, confusion, decreased appetite

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

- AM presented to the hospital due to stomach pain on going for two weeks. She mentioned that she was experiencing dizziness and fell from being intoxicated which

caused her stomach pain. The location of the pain is not localized but rather sharp all over. It would last for a couple minutes then go away. No over the counter medication helped relieve pain but patient have taken Tylenol to relieve some pain. She stated it hurts more when she begins to lay down which causes her to lay down slowly at her own pace. Once she's in a comfortable position, her pain somewhat subside only for a short period of time until the sharp pain comes again. AM is currently in the hospital taking fentanyl for generalize pain, but nothing really seems to help with the stomach pain.

### **Primary Diagnosis**

Primary Diagnosis on Admission (3 points): **alcohol-induced liver cirrhosis with ascites**

Secondary Diagnosis (if applicable): **acute colitis**

## Pathophysiology

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

Cirrhosis is the final stage of alcoholic liver disease due to alcohol abuse (Mount Siani Health System, n.d.). Alcoholic cirrhosis is the most advanced and irreversible form of liver injury (Patel, 2023). The liver can accommodate a certain level of alcohol consumption but if the consumption increases, it will result in alcoholic hepatitis (Patel, 2023). According to Mayo Clinic (2023), alcoholic hepatitis is defined as “swelling/inflammation of the liver caused by drinking destroying the liver cells that causes yellowing of the skin and whites of the eyes”. Progression of alcohol consumption leads to severe liver damage resulting in alcoholic cirrhosis (Patel, 2023). Alcohol is absorbed through the stomach. The small intestine cannot absorb the content of alcohol so what is left is catabolized in the liver (Jackson, 2023). Once in the liver, it can take up three different pathways. Liver enzyme, alcohol dehydrogenase (ADH), oxidizes alcohol into acetaldehyde in the cytosol of the cell (Jackson, 2023). Acetaldehyde dehydrogenase (ALDH), a mitochondrial enzyme, then oxidizes acetaldehyde into acetate (Jackson, 2023). These reactions convert nicotinamide-adenine dinucleotide (NAD<sup>+</sup>) to (NADH), when elevated produces more fatty acid resulting in excessive fat in the liver (Jackson, 2023). The liver then becomes large, heavy, greasy and tender (Jackson, 2023). No symptoms are present at this point. Acetaldehyde binds to macromolecules and cell membranes inside the cells, inhibit it and form acetaldehyde adducts (Jackson, 2023). Your immune system recognizes these compounds as foreign and start sending neutrophils to that site (Jackson, 2023). Liver then becomes inflamed and damaged resulting in alcoholic hepatitis and scar tissue around central vein of liver (Jackson, 2023). Once an individual reaches end-stage liver disease with the progression of cirrhosis, a liver transplant is needed (Mount Sinai Health System, n.d.).

Alcoholic liver disease effects on some, but not limited to, body systems

- Cardiovascular: cardiomyopathy is a condition where drinking too much alcohol damages the heart by changing its shape causing long-term damage and heart failure (Cleveland Clinic, 2021).
- Digestive: delay in gastric sensorimotor function and bowel transit (Kalaitzakis, 2014)
- Integumentary: skin lesions like pruritus, jaundice, and nail change (Bhandari, 2022)
- Reproductive: decreased fertility (Kaltenbach, 2023)

Men are most likely to be diagnosed with alcoholic liver disease between the ages of 40 and 50, however women may develop this disease (Mount Sinai Health System, n.d.). Early signs of this complication are, but not limited to, belly pain, loss of energy, poor appetite and weight loss (Mount Sinai Health System, n.d.). Jaundice is the cardinal sign of liver failure (Patel, 2023).

There will be a physical examination and evaluation completed to assess this diagnosis.

Providers may order labs for complete blood count: to rule out infection, prothrombin time and INR: to assess liver function, abdominal ultrasonography: to observe for biliary obstruction and liver tumors, basic metabolic profile: to rule out renal failure, SAAG (serum-ascites albumin gradient), and a liver biopsy (Patel, 2023). As liver function worsen, symptoms are edema in legs and abdomen (ascites), yellowing of skin, bruising and abnormal bleeding, pale stools, and bleeding of the gastrointestinal tract (Mount Sinai Health System, n.d.). Your provider will look for enlarged spleen and liver, red palms, widened veins in the wall of the abdomen and excess breast tissue in men (Mount Sinai Health System, n.d.) Liver disease is a treatable condition if treated before damages occur.

### Pathophysiology References (2) (APA):

*Alcoholic hepatitis*. (2023, Nov 9). Mayo Clinic. <https://www.mayoclinic.org/diseases-conditions/alcoholic-hepatitis/symptoms-causes/syc-20351388>

*Alcohol-Induced Cardiomyopathy: Causes, Symptoms and Treatment*. (2021, Nov 19). Cleveland Clinic. <https://my.clevelandclinic.org/health/diseases/21994-alcoholic-cardiomyopathy>

*Alcoholic liver disease*. (n.d.). Mount Sinai Health System. Retrieved October 5, 2024, from <https://www.mountsinai.org/health-library/diseases-conditions/alcoholic-liver-disease#:~:text=Over%20time%2C%20scarring%20and%20cirrhosis,and%20more%20alcohol%20you%20consume>.

Bhandari, A, Mahajan, R. (2022, July). *Skin Changes in Cirrhosis*. Journal of clinical and experimental hepatology.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9257870/#:~:text=Cirrhosis%20of%20any%20origin%20can,vascular%20changes%2C%20and%20hormonal%20changes>.

Jackson, W. (2023, July). *Alcohol-Related Liver Disease*. Merck Manual Professional Edition. <https://www.maerckmanuals.com/professional/hepatic-and-biliary-disorders/alcohol-related-liver-disease/alcohol-related-liver-disease>

Kalaitzakis, E. (2014, Oct 28). *Gastrointestinal dysfunction in liver cirrhosis*. World journal of gastroenterology.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4209534/#:~:text=Gastric%20emptying%20and%20small%20bowel%20transit%20are%20delayed%2C%20which%20may,common%20in%20patients%20with%20cirrhosis>

Kaltenbach, M. (2023, Jan 16). Why is it recommended to provide reproductive health counseling to women with cirrhosis? American Association for the Study of Liver Diseases. <https://www.aasld.org/liver-fellow-network/core-series/why-series/why-it-recommended-provide-reproductive-health#:~:text=Cirrhotic%20livers%20are%20thought%20to,also%20contribute%20to%20decreased%20fertility.>

Patel, R & Mueller, M. (2023, July 13). *Alcoholic Liver Disease*. StatPearls [Internet] Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK546632/>

**Vital Signs, 1 set (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS**

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
10:05a	100	104/60	18	98.1F	98

**Pain Assessment, 1 set (5 points)**

Time	Scale	Location	Severity	Characteristics	Interventions
8:16a	Number	Abdomen	9	Sharp, strong, deep	Fentanyl

**Intake and Output (2 points)**

Intake (in mL)	Output (in mL)
(unknown)	(1) Bowel movement with bedpan (2) Incontinent episodes in dialysis

**Nursing Diagnosis (15 points)**

**\*Must be NANDA approved nursing diagnosis\***

<b>Nursing Diagnosis</b>	<b>Rationale</b>	<b>Interventions (2 per dx)</b>	<b>Outcome Goal (1 per dx)</b>	<b>Evaluation</b>
<ul style="list-style-type: none"> <li>• Include full nursing diagnosis with “related to” and “as evidenced by” components</li> <li>• Listed in order by priority – highest priority to lowest priority pertinent to this client</li> </ul>	<ul style="list-style-type: none"> <li>• Explain why the nursing diagnosis was chosen</li> </ul>			<ul style="list-style-type: none"> <li>• How did the client/family respond to the nurse’s actions?</li> <li>• Client response, status of goals and outcomes, modifications to plan.</li> </ul>

1. Acute pain related to portal hypertensive gastropathy as evidenced by thickening gastric wall and gastric ulcers. I chose this nursing diagnosis because she was diagnosis with

cirrhosis of the liver while experiencing abdomen pain. The interventions I will use is perform comfort measures to promote relaxation, such as massage, bathing, repositioning, and relaxation techniques (Phelps, 2020) and use the pain scale when assessing pain (Phelp, 2020). Outcome: patient will identify measures effective in relieving pain (Phelps, 2020). Patient evaluation will be to discuss characteristics of pain, including location, duration, and frequency (Phelps, 2020).

2. Risk of impaired liver function related to alcohol-induced liver cirrhosis. I chose this nursing diagnosis because her albumin levels are abnormally low sitting at 2.3 (normal level: 3.4 – 5.4g/dL) which is the protein produced by the liver. The intervention I will use is monitor for clinical manifestations of hepatic inflammation and dysfunctions (Phelps, 2020) and monitor customary clinical laboratory test like complete blood cell count, basic metabolic panel and hepatic plasma markers (Phelps, 2020). Outcome: patient will modify lifestyle and behaviors to avoid risk of hepatic dysfunction and inflammation (Phelps, 2020). Patient evaluation will be to follow prescribed treatment plan (Phelps, 2020).

**Other References (APA):**

Phelps, L. (2020). *Sparks & Taylor's nursing diagnosis reference manual eleventh edition*.  
Wolters Kluwe

### Subjective Data

pulse: 100, BP: 104/60, resp:18. O2: 98.  
 Test Abdominal exam, generalized abdominal  
 Sodium (137), rubin (12), glucose  
 (107), auscultation, generalized weakness,  
 shaking, confusion, decreased appetite  
 hemoglobin (8.9), WBC (15.65)

### Objective Data

### Nursing Diagnosis/Outcomes

1. Acute pain related to portal hypertensive gastropathy as evidenced by thickening gastric wall and gastric ulcers. Patient will identify measures effective in relieving pain (Phelps, 2020)
2. Risk of impaired liver function related to alcohol induced liver disease. Patient will modify lifestyle and avoid risk of hepatic dysfunction and inflammation (Phelps, 2020)

### Client Information

47 yrs old, female, married,  
 white/non-Hispanic, 5'4, 126 lbs,  
 dialysis patient

Nursing Interventions  
 1. perform comfort measures to promote relaxation, such as massage, bathing, repositioning, and relaxation techniques  
 2. monitor for clinical manifestations of hepatic dysfunction  
 Laboratory test like complete blood cell count, basic metabolic panel and hepatic plasma markers (Phelps, 2020)



