Virtual Clincal Assignment for Dr. Nesbitt AY 20-21

Chapter 43 :: Patient With Cirrhosis

Objectives

- Identify relevant assessment data for a patient admitted with alcohol abuse and cirrhosis of the liver.
- Evaluate the results of diagnostic studies for a patient with cirrhosis.
- Prioritize nursing diagnoses and interventions for a patient with cirrhosis.
- Describe interprofessional care of a patient with ascites and esophageal varices.
- Prioritize nursing care of a patient with acute complications related to cirrhosis.
- Appropriately delegate nursing care of a patient with an acute complication of cirrhosis.
- Develop an individualized teaching plan for a patient with chronic complications of cirrhosis.

CASE STUDY

P.J. is a 55-year-old white male who was admitted to the medical-surgical unit just after midnight with acute shortness of breath related to an increase in ascites. He has had a long-standing history of cirrhosis and alcohol abuse. He typically drinks two six packs of beer and a couple shots of whiskey every day.

Question 1: Based on P.J.'s report of his drinking habits, you recognize the importance of monitoring the patient for withdrawal symptoms. Select the statements that accurately reflect alcohol withdrawal symptoms. There are 5 correct answers.

A. The symptoms of alcohol withdrawal do not always progress in a predictable manner.

B. Anxiety, agitation, weakness, nausea and/or vomiting are symptoms of alcohol withdrawal.

C. Withdrawal symptoms will not begin until at least 12 hours after the last drink.

D. Alcohol withdrawal delirium can usually be prevented or controlled by administration of benzodiazepines such as lorazepam (Ativan).

E. Withdrawal symptoms may last up to 14 days.

F. Seizure activity typically occurs 72 hours or more after the last drink.

G. Alcohol withdrawal delirium may occur 30 to 120 hours after the last drink.

H. Visual or auditory hallucinations are not typically present with alcohol withdrawal delirium.

Question 2: As a result of his liver disease, P.J. manifests the signs and symptoms listed below. Match these clinical manifestations with the pathophysiologic changes that occur in cirrhosis.

Instructions: Match each item in the first column to the correct item in the second column.

A : 2 B:1 C:4 D:3 E:6 F:5

CLINICAL MANIFESTATIONS	PATHOPHYSIOLOGIC CHANGES
A. Anemia, leukopenia, thrombocytopenia	1. Decreased aldosterone metabolism
B. Hypokalemia	2. Vascular congestion of the spleen
C. Jaundice	3. Vitamin B deficiencies
D. Peripheral neuropathy	4. Decreased bilirubin conjugation and excretion
E. Petechiae and purpura	5. Increased estrogen levels
F. Testicular atrophy	6. Decreased vitamin K absorption

Question 3: While P.J. is hospitalized, you recognize the need to monitor him closely. Select the appropriate assessments related to the patient's diagnosis of cirrhosis. There are 6 correct answers.

A. Intake and output
B. Color of urine and stools
C. Daily weights
D. Measurement of abdominal girth
E. Peripheral pulses
F. Skin color
G. Skin temperature
H. Bleeding manifestations

Question 4: You respond to P.J.'s question regarding his yellow IV solution based on knowledge that the IV contains

A. phenytoin to prevent seizures.
B. vitamin K to correct coagulation deficiencies.
C. lorazepam (Ativan) to control withdrawal delirium.
D. thiamine and multivitamins to prevent confusion and ataxia.

Question 5: You review P.J.'s diagnostic test results while planning appropriate nursing care. Indicate whether the following laboratory tests would be increased or decreased with liver damage.

LAB TEST	INCREASED	DECREASED
Albumin		X
Ammonia	X	
Bilirubin	X	
Platelets		X
Prothrombin time		X
Red blood cells		X
Total protein		X
White blood cells		X

Question 6: P.J. has a nursing diagnosis of ineffective breathing pattern *related to* reduced lung capacity. The *most* appropriate nursing intervention for him is to

A. place him in Fowler's position.

B. promote deep breathing and coughing.

C. ensure that he is maintaining a low-protein diet.

D. perform oral and pharyngeal suctioning to reduce the risk of aspiration.

Question 7: You plan care for P.J. based on knowledge of interprofessional treatment of his ascites. Select the appropriate statements related to management of ascites. There are 6 correct answers.

A. Patients with severe ascites may need to restrict their sodium intake to 2 g/day.

B. The patient is usually not on restricted fluids unless severe ascites develops.

C. It is important to assess and control fluid and electrolyte balance in a patient with ascites.

D. Tolvaptan (Samsca), a vasopressin-receptor antagonist used to correct hyponatremia in patients with cirrhosis. The medication corrects dilutional hyponatremia by stimulating an increase in water excretion.

E. Albumin may be used to maintain intravascular volume and adequate urinary output.

F. Loop diuretics alone provide the best control of fluid balance.

G. A paracentesis is reserved for patients with impaired respiration or abdominal pain caused by severe ascites.

H A peritoneovenous shunt is part of first-line therapy for patients with ascites.

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I. A transjugular intrahepatic portosystemic shunt (TIPS) procedure may be used to alleviate ascites that does not respond to diuretics.

Question 8: The unlicensed assistive personnel with whom you are working notifies you that P.J. just vomited about 500 mL of dark red blood. You notify the health care provider and prepare P.J. for

A. balloon tamponade.

B. endoscopic examination.

C. portosystemic shunt surgery.

D. administration of pooled platelets.

Question 9: While waiting for the patient to undergo the endoscopy procedure, identify priority nursing interventions that you must complete and those that may be delegated to unlicensed assistive personnel (UAP). Match the intervention with either the RN or UAP.

STATEMENT	REGISTERED NURSE	UNLICENSED ASSISTIVE PERSONNEL
Take vital signs every 15 minutes		X
Assess patient for clinical manifestations of hypovolemic shock.	X	
Initiate two large bore IV access.	X	
Stay with patient and provide emotional support.		X
Assess patient's respiratory status and need for airway management.	X	
Determine need to administer prn antihypertensive medications.	X	
Determine need to administer prn antihypertensive medications.	X	
Call endoscopy lab regarding planned procedure		X

Question 10: P.J.'s bleeding is controlled with sclerotherapy and ligation of the varices. His admission ammonia level was 60 mg/dL (35.2 mmol/L), but it is 90 mg/dL (52.8 mmol/L) 18 hours after his bleed. You recognize that this elevation in ammonia level is *most* likely caused by

A. cerebral ischemia during the hemorrhage.

B. blood in the intestine as a source of increased protein.

C. redistribution of blood away from the kidneys as an effect of vasopressin.

D. impaired metabolism of vasopressin and nitroglycerin used for treatment of the hemorrhage.

Question 11: While P.J.'s ammonia level is elevated, you recognize that a *priority* assessment would focus on which of the following? There are 5 correct answers.

A. Level of consciousness

B. Sensory abnormalities

C. Motor abnormalities

D. Psychosocial integrity

E. Fluid and electrolyte imbalance

F. Patient knowledge of disease process

G. Acid-base balance

H. Skin integrity

Mr. Jones returns from EGD lab in stable condition but slightly confused about time. All bleeding has stopped.

Question 12: P.J. has signs of advanced cirrhosis with marked ascites, peripheral edema, mild hepatic encephalopathy, and esophageal varices. Interprofessional care involves interventions to treat his complications and increase his comfort. Match the rationales with the interventions.

Instructions: Match each item in the first column to the correct item in the second column.

A:2 B:9 C:5 D:8 E:3 F:6 G:7 H:4 I:1

A.	pantoprazole (Protonix)	1.	Blocks effect of hyperaldosteronism, reducing ascites and elevating serum potassium
B.	furosemide (Lasix)	2.	Decreases gastric acidity
C.	high-carbohydrate diet	3.	Destroys bowel bacteria, reducing ammonia production
D.	lactulose	4.	Increases plasma colloid osmotic pressure to maintain intravascular

			volume
E.	rifaximin (Xifaxan)	5.	Prevents hypoglycemia and catabolism
F.	paracentesis	6.	Provides temporary relief of abdominal pain and respiratory distress
G.	propranolol (Inderal)	7.	Reduces portal venous pressure, preventing variceal bleeding
H.	albumin	8.	Traps ammonia in the intestine, preventing absorption into blood
I.	spironolactone (Aldactone)	9.	Used in combination with potassium-sparing diuretic to mobilize ascitic fluid

Question 13: P.J.'s family asks the nurse if a liver transplant is possible for him. An appropriate response would be

A. "Cirrhosis is a major indication for liver transplants in adults, and you should discuss this possibility with his doctor."

B. "Liver transplants are possible, but their use is limited because patients experience a high rejection rate of this organ."

C. "A liver transplant is an accepted treatment for patients with end-stage liver disease and offers a return to a normal life."

D. "I'm sorry, but liver transplants are not indicated for patients with cirrhosis because so much damage has occurred to other body systems."