**Description:** This module continues the application of the concept of metabolism. The module will focus on the exemplar of liver disease and the associated nursing responsibilities.

**Learning Outcomes:**
Upon completion of this module, the student will be able to:
1. Identify the physiologic mechanisms that maintain normal liver function.
2. Identify the etiologies and clinical manifestations of the patient with cirrhosis of the liver.
3. Describe the complications associated with cirrhosis of the liver.
4. Describe the collaborative care and nursing management of the patient with cirrhosis of the liver.
4. Describe the diagnostic studies used to identify the presence and cause of cirrhosis.

**Learning Resources:**
Text: *NC ADN Textbook*, Volume II, Chapter 20, pp. 1241-1254


Search web for research-based articles on liver failure

DVD: Nursing Assessment of the Abdomen

**Learning Activities:**
Discuss “Cirrhosis of the Liver” case study

Discuss web research results with class

Practice abdominal assessment skills in lab

**Evaluation:**
Unit exam
Lab competencies
Clinical Performance Evaluation
CASE STUDY
“Cirrhosis of the Liver”
(Adapted from Lewis, Medical Surgical Nursing: Assessment and Management of Clinical Problems, 7th ed.)

Patient Profile: Mr. Casa is a 58-year-old Caucasian male admitted with a diagnosis of cirrhosis of the liver. He has been having abdominal discomfort, blood in his stool, and has been vomiting “black stuff” for the last 2 days.

Subjective Data: Has been diagnosed with cirrhosis for 3 years. Mr. Casa states he has a history of alcohol consumption since age 15, which has been heavy for the last 10 years. He states he has been attending AA for the last 3 months and has been “clean” since that time with the exception of one setback. Mr. Casa complains today of anorexia, nausea, and abdominal discomfort and distention.

Objective Data: Physical exam reveals a thin, undernourished male, slightly jaundiced, with moderate ascites; abdominal telangiectasia and striae; abdomen positive for hepatomegaly and splenomegaly; 3+ pitting edema in the lower extremities. Labs reveal a total bilirubin of 15 mg/dl; serum ammonia 220 mcg/dl; AST 190 U/L; ALT 210 U/L.

Critical Thinking Questions:
1. What are possible causes of cirrhosis? What type is Mr. Casa suffering from?
2. Describe the pathophysiologic changes that occur in the liver with cirrhosis.
3. Explain the pathophysiologic basis for each of Mr. Casa’s manifestations.
4. Discuss the significance of Mr. Casa’s lab results. How could Mr. Casa’s ammonia levels be controlled or decreased?
5. How would you know if Mr. Casa began exhibiting signs of hepatic encephalopathy? What would you monitor?
6. What are the possible causes of Mr. Casa’s gastrointestinal bleeding? How could it be controlled?
7. In the early stages of cirrhosis, what can be done to control the disease?
8. Based on the assessment data presented, write 2 nursing diagnoses. Are there any collaborative problems?