

Chapter 46

**Care of the Patient With a
Gallbladder, Liver, Biliary Tract, or
Exocrine Pancreatic Disorder**

- Lesson 46.1**
1. Discuss nursing interventions for the diagnostic examinations of patients with disorders of the gallbladder, liver, biliary tract, and exocrine pancreas.
 2. Explain the etiology, pathophysiology, clinical manifestations, assessment, diagnostic tests, medical management, and nursing interventions for the patient with cirrhosis of the liver, carcinoma of the liver, hepatitis, liver abscesses, cholecystitis, cholelithiasis, pancreatitis, and cancer of the pancreas.
 3. Discuss specific complications and teaching content for the patient with cirrhosis of the liver.
 4. Define jaundice and describe signs and symptoms that may occur with jaundice.
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Laboratory and Diagnostic Examinations

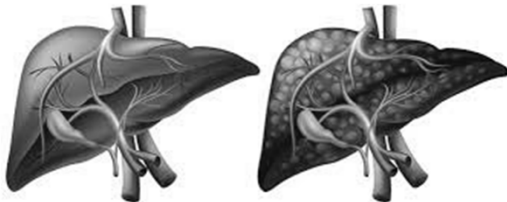
- Serum bilirubin test
- Serum lipase test
- Ultrasound of the liver
- Liver enzymes
- Serum protein test
- Oral cholecystogram (OCG)
- Intravenous cholangiography
- Operative cholangiography
- T-tube cholangiography
- Ultrasonograph
- Gallbladder sca
- Needle liver biopsy
- Radioisotope liver scanning
- Serum ammonia level
- Hepatitis virus studies
- Serum amylase studies
- Serum lipase
- Urine amylase test
- Computed tomography
- Endoscopic retrograde cholangiopancreatography



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Cirrhosis

- A degenerative disease of the liver in which the lobes are covered with fibrous tissue, and the lobules are infiltrated with fat



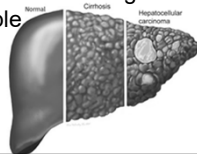
normal liver

liver with cirrhosis

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Carcinoma of the Liver

- Diagnosis is difficult, in early stages may mimic cirrhosis
- Treatment is usually palliative and prognosis is commonly bleak
- Chemotherapy and surgery may be used
- Nursing interventions focus on maintaining as high a quality of life as possible



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Hepatitis

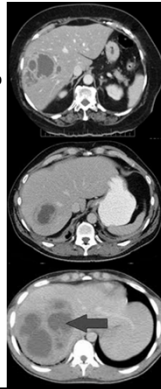


- Exists as type A, B, C, D, E, G
- Symptoms vary greatly and many patients are asymptomatic
- Prevention is the best treatment
- Serum tests similar to those for cirrhosis may be completed
- Serum test for hepatitis markers
- Medical treatment focuses on decreasing viral load

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Liver Abscess

- A walled-off area of infection contained within the liver
- Left untreated, can be fatal (fatality rate used to be 100% due to vague symptoms)
- Symptoms include pain, fever, abdominal pain, chills
- The nurse should assess signs and symptoms and monitor the liver's ability to function normally (assess lab values)
- Diagnosed radiographically
- Usually treated with IV antibiotics, but can be drained surgically



Cholecystitis and Cholelithiasis

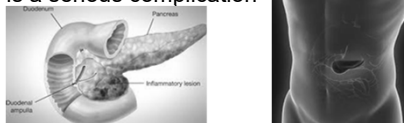
- The two most common conditions of the gallbladder are cholecystitis (inflammation of the gallbladder) and cholelithiasis (presence of gallstones in the gallbladder)
- Cholecystitis can be caused by an obstruction, gallstone, or tumor
- May be acute or chronic
- Characterized by indigestion, nausea, and vomiting
- Patient often reports pain in the upper right quadrant that radiates to the right shoulder
- Diagnosis made by ultrasound or HIDA scan
- Medical management usually aimed at surgical correction



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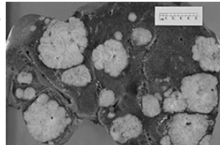
Pancreatitis

- Inflammatory condition of the pancreas that may be acute or chronic
- Generally caused by alcohol ingestion or biliary disease
- Pancreatic enzymes build up and begin to digest the pancreas
- The development of pseudocysts or abscesses is a serious complication



Cancer of the Pancreas

- Most common risk factor is cigarette smoking
- Other risk factors include exposure to chemical carcinogens, diabetes mellitus, cirrhosis, and chronic pancreatitis
- Begins with vague symptoms (anorexia, nausea)
- Abdominal pain in midepigastic region may occur
- About half of patients with cancer develop diabetes mellitus



Complications of Cirrhosis

- Fluid retention
- Esophageal varices
- Hepatic encephalopathy



Jaundice

- The discoloration of body tissues caused by abnormally high blood levels of bilirubin
- Assess skin color, and color of mucus membranes and sclera of the eye



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Lesson 46.2

5. State the six types of viral hepatitis, including their modes of transmission.
6. List the subjective and objective data for the patient with viral hepatitis.
7. Discuss the indicators for liver transplantation and the immunosuppressant drugs to reduce rejection.
8. Discuss the two methods of surgical treatment for cholecystitis and cholelithiasis.

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Hepatitis Transmission

- Hepatitis A (HAV): Fecal-oral
- Hepatitis B (HBV): Body fluids
- Hepatitis C (HCV): Body fluids
- Hepatitis D (HDV): Body fluids, occurs concurrently with HBV
- Hepatitis E (HEV): Body fluids, occurs concurrently with HCV



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Subjective and Objective Data for Hepatitis

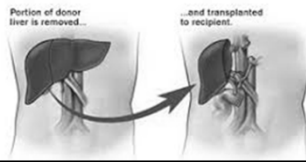
- Subjective data: general malaise, aching muscles, photophobia, lassitude, headaches, chills, abdominal pain, dyspepsia, nausea, diarrhea, constipation
- Objective data: hepatomegaly, enlarged lymph nodes, weight loss, jaundice

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Liver Transplantation

(Slide 1 of 2)

- Indications for liver transplantation include
 - > Congenital biliary abnormalities
 - > Inborn errors of metabolism
 - > Hepatic malignancy (confined to the liver)
 - > Sclerosing cholangitis
 - > Chronic end-stage liver disease



Portion of donor liver is removed... ..and transplanted to recipient.

Liver Transplantation

(Slide 2 of 2)

- Medications to Prevent Rejection
 - > Cyclosporine
 - > Azathioprine (Imuran)
 - > Corticosteroids
 - > Tacrolimus (Prograf)
 - > Mycophenolate mofetil (Cellcept)
 - > Basiliximab (Simulect)
 - > Daclizumab (Zenapax)

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Surgical Treatment of Cholecystitis and Cholelithiasis

- The treatment of choice for cholecystitis and cholelithiasis is surgery
- Two types of surgical procedures are performed
 - > Laparoscopic cholecystectomy
 - > Open abdominal cholecystectomy

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