

Initial Evaluation of Persons With Chronic HCV



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Outline



- Key aspects of history and physical examination
- Recommended laboratory studies after initial diagnosis
- Immunizations for persons with chronic hepatitis C virus (HCV)
- Screening for other causes and contributors of liver disease

Key Aspects of History and Physical Examination



Key Aspects of History and Physical Examination

- Key elements of the patient's history
 - When and how diagnosed
 - Risk factors
 - Injection drug use: when, how long, rehab
 - Nasal cocaine
 - Blood transfusion
 - Tattoos and body piercing
 - Sexual exposures
 - Family exposures
 - Work-up to date
 - Prior treatment status
 - Comorbidities
 - Other known liver diseases, hepatotoxic drugs and alcohol
 - Cardiac, pulmonary, rheumatologic, neurologic
 - Psychiatric
 - Family history of liver disease
 - Current medications

Key Aspects of History and Physical Examination (Continued)



- Physical exam
 - Eyes
 - ✦ Scleral icterus
 - ✦ Retinopathy on fundoscopic exam
 - Thyroid
 - ✦ Enlarged or nodular
 - Skin
 - ✦ Jaundiced
 - ✦ Palmar erythema
 - ✦ Spider angiomas
 - Lungs
 - ✦ Right hydrothorax
 - Cardiovascular
 - ✦ Rate and rhythm
 - Abdomen
 - ✦ Liver size and texture
 - ✦ Spleen size
 - ✦ Other masses
 - ✦ Caput
 - ✦ Ascites
 - Neurologic
 - ✦ Tremor
 - ✦ Asterixis
 - Psychiatric
 - ✦ Mood and affect

Recommended Laboratory Studies After Initial Diagnosis



Recommended Laboratory Studies After Initial Diagnosis



- **General**
 - Hepatic profile
 - Renal profile
 - Complete blood cell count with differential
 - Thyroid-stimulating hormone
- **Disease-related**
 - HCV RNA quantitative
 - HCV genotype
 - IL28B genotype
 - Hepatitis B surface antibody (HBsAb)
 - Anti-hepatitis A virus antibody immunoglobulin G (IgG)
 - Alpha fetoprotein or baseline ultrasound

Recommended Laboratory Studies After Initial Diagnosis (Continued)



- Determining whether advanced fibrosis or cirrhosis is present
 - Liver biopsy
 - Noninvasive markers
 - ✦ Proprietary indices (eg, FibroSure)
 - ✦ Nonproprietary indices (eg, AST-to-platelet ratio index, FIB-4 index)
 - Elastography
 - ✦ Acoustic
 - ✦ Magnetic resonance imaging

Recommended Laboratory Studies After Initial Diagnosis (Continued)



- When advanced fibrosis or cirrhosis is present or suspected
 - Esophagogastroduodenoscopy (varices)
 - Ultrasound (hepatocellular carcinoma [HCC])
 - Model for End-Stage Liver Disease (MELD) evaluation
- Refer to transplant center
 - MELD > 10
 - Any history of bleeding varices
 - Ascites
 - Hepatic encephalopathy

Immunizations for Persons With Chronic HCV



Immunizations for Persons With Chronic HCV



- **Hepatitis A virus**
 - Test for hepatitis A antibody IgG
 - Vaccinate twice, 6 months apart, or use combination vaccine
- **Hepatitis B virus**
 - Test for HBsAb
 - Vaccinate 3 times (0, 1, and 6 months) or use combination vaccine
 - For immunosuppressed patients consider double-dose vaccine series

Screening for Other Causes and Contributors of Liver Disease



Screening for Other Causes and Contributors of Liver Disease



- Evaluation of other diseases optional but recommended if advanced fibrosis or cirrhosis is present
 - Alpha-1 antitrypsin deficiency
 - ✦ Alpha-1 antitrypsin level
 - ✦ Alpha-1 antitrypsin phenotype
 - Wilson disease
 - ✦ Ceruloplasmin
 - ✦ Urinary copper

Screening for Other Causes and Contributors of Liver Disease



- Autoimmune liver disease
 - ✦ Antinuclear antibody
 - ✦ Antismooth muscle antibody
 - ✦ Antimichondrial antibody
 - ✦ Liver-kidney microsomal antibody type 1
- Genetic hemochromatosis
 - ✦ Ferritin
 - ✦ Iron saturation
- Nonalcoholic fatty liver and nonalcoholic steatohepatitis
 - ✦ Homeostasis model assessment (fasting insulin and glucose)

Summary



- Key elements for evaluation of a patient with HCV:
 - Detailed liver-focused history
 - Liver-directed physical examination
 - Evaluation of laboratory tests that help stage liver disease and determine if comorbidities are present
- Prevention of other liver diseases is important
 - Vaccinate for hepatitis A and B if necessary
- Determine if advanced fibrosis or cirrhosis is present
 - Refer to a hepatologist at a transplant center
 - Surveillance for varices and HCC is critical

End



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