

After the Initial Diagnosis of HBsAg+ Overview of Next Steps

History

- ▶ Previous or current symptoms of liver disease
- ▶ Source of HBV exposure (mother, household member, sexual contact, needle use, etc.)
- ▶ Previous or current immunosuppression (HIV, chemotherapy, biologic agents, etc.)
- ▶ Alcohol and drug use
- ▶ Cigarette smoking history
- ▶ Sexual history
- ▶ Born or parents born in intermediate or high prevalence regions
- ▶ Family history
- ▶ Occupational history
- ▶ History of incarceration
- ▶ History of combat exposure
- ▶ Complete review of systems

Physical Exam

- ▶ Complete physical exam
- ▶ Physical signs of chronic liver disease

Laboratory

- ▶ HBsAg
- ▶ HBV DNA
- ▶ HBeAg and anti-HBeAg
- ▶ HDV Ab
- ▶ HCV Ab w/reflex HCV RNA
- ▶ HAV IgG (total Ab)
- ▶ HIV Ag/Ab
- ▶ CBC/platelet
- ▶ Liver: AST, ALT, alkaline phosphatase, total bilirubin, direct bilirubin, Albumin
- ▶ Sodium, potassium, creatinine, glucose (chem 7)
- ▶ PT/INR
- ▶ Ferritin
- ▶ Vitamin D

Look for Evidence of Cirrhosis

- ▶ Ultrasound abdomen
 - If evidence of a cirrhotic appearing liver and/or enlarged spleen
- ▶ Platelet count (not applicable in asplenic patient)
 - If low, especially if <125K

If No Evidence of Cirrhosis, Determination of Fibrosis

- ▶ FIB-4 score and/or APRI score
Cirrhosis can be excluded by:
 - FIB-4 < 0.70
 - APRI score < 0.45
- ▶ Biopsy (if needed)
- ▶ Fibroscan (preferred)

HBV Treatment

- ▶ Determine if recommended for treatment; refer to specialist
- ▶ All patients with (+) sAg and cirrhosis or co-infection should be treated

Patient Education

- ▶ Hepatitis B and potential outcomes (e.g., cirrhosis, HCC)
- ▶ Need for long term monitoring
- ▶ Role of Hepatitis B medications
- ▶ Sexual transmission
- ▶ Household transmission
- ▶ Mother-child transmission
- ▶ Testing for pregnant patients with hepatitis B
- ▶ Blood donation
- ▶ Ways to reduce risk of cirrhosis and HCC (e.g., lower alcohol, smoking, obesity, etc)
- ▶ Testing for co-infection – HIV, HCV
- ▶ Effect of injection drugs and use of clean needle exchange programs

Immunizations

- ▶ Hepatitis A
 - 2 shot series
- ▶ Influenza
 - Annually
- ▶ Tdap
 - Once and then Td booster every 10 years
- ▶ Varicella (if unvaccinated)
 - 2 doses
- ▶ Recombinant zoster vaccine (RZV)
 - 2 doses
- ▶ Pneumonia vaccinations:
PPSV23 and PCV13
 1. Initial: 1 dose PPSV23 at age 19-64 years
 2. And, 1 dose PCV13 at ≥ 65 years (at least 1 year after PPSV23)
 3. And, 1 final dose PPSV23 at ≥ 65 years (at least 1 year after PCV13 and at least 5 years after the most recent dose of PPSV23)

For further information:

<http://www.cdc.gov/vaccines/schedules>

Screen for HCC in HBV Patients if:

- ▶ Cirrhosis
- ▶ Asian female > 50
- ▶ Asian or Black man > 40
- ▶ First-degree family history HCC
- ▶ Additional diagnosis of NASH
- ▶ Co-infection (HCV, HDV, HIV)