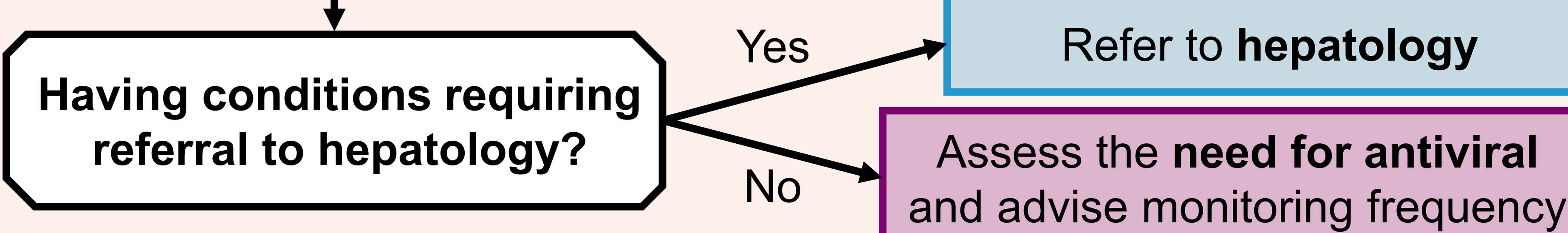
Management of Adult Patients with Chronic Hepatitis B (CHB) in Primary Care - Summary

Initial assessment and triage of CHB patients

Initial Assessment
- History
- Physical examination
- Baseline blood tests
- Non-invasive tests for liver fibrosis (e.g. AST-to-platelet ratio (APRI), Fibrosis-4 index (FIB-4) and transient elastography)
- Consider liver ultrasonography (USG)

Counselling
- Reinforce the importance of lifelong monitoring
- Promote a healthy diet and lifestyle
- Advise on preventive measures against HBV transmission



Indications for antiviral treatment

- CHB patients with **advanced fibrosis** (liver stiffness measurement (LSM) > 9 kPa), **cirrhosis**, **decompensated liver disease**, or **HCC**; and **detectable HBV DNA**
- CHB patients with **elevated ALT** (> upper limit of normal (ULN) [i.e. 35 U/L for males and 25 U/L for females]) and **HBV DNA > 2000 IU/mL**, regardless of HBeAg status
- Pre-emptive treatment for patients **on anti-cancer chemotherapy** or **immunosuppressive therapy** at risk of hepatitis B reactivation
- **Transplant patients** with hepatitis B infection
- **Pregnant women** with HBV DNA > 200,000 IU/mL

Subgroups of CHB patients requiring hepatology care

- Patients with **complications** of CHB
- Patients with **concurrent liver conditions**
- Patients with **liver lesions**
- Populations with **specific management needs** and **indications for antiviral**
  - Co-infection with HCV or HIV
  - Pregnant women with high viral load
  - Patients on immunosuppressive therapy at risk of HBV reactivation

Please refer to *Management of Adult Patients with Chronic Hepatitis B in Primary Care* (September 2023) for details, which is accessible at www.hepatitis.gov.hk.

Monitoring of CHB patients

Regular monitoring is **necessary** for all patients with CHB, which consists of the following:

- **Clinical assessment**
  - Signs and symptoms of decompensation
- **Laboratory investigations**

Test	Testing interval	Remarks
Liver function test (LFT)	Every 6 months	Every 3 – 6 months for HBeAg+ patients not yet on treatment
Alpha-fetoprotein (AFP)	Every 6 months	
HBV DNA	Every 6 - 12 months	Every 6 months during the 1st year of treatment, then yearly
APRI	Yearly	Derived from complete blood count test and AST from LFT
HBeAg and anti-HBe (for HBeAg+ve patients)	Yearly until HBeAg seroconversion	
HBsAg (for HBeAg-ve patients)	Yearly	
Renal function test (RFT), including eGFR (for patients on treatment)	Every 6 months	With serum phosphate if on tenofovir

- Evaluate **need for antiviral treatment** if not yet on treatment
  - Start treatment if fulfill indications
- **Monitor adherence** if on treatment

- Review need for **specialist referral**

- Consider periodic **non-invasive test** for assessment of **liver fibrosis** (e.g. transient elastography)
- Recommend **hepatocellular carcinoma (HCC) surveillance with USG** in patients at increased risk

Note: Adjust monitoring interval according to stage of disease and need for antiviral

HCC surveillance

Risk factors
- Patients with cirrhosis
- Men over 40 years of age
- Patients with family history of HCC
- Women over 50 years of age

Modalities
- AFP should be performed every 6 months; **and**
- USG of the liver, preferably every 6 months, should be recommended

Other criteria for referral **from primary care to hepatology**

- **Unexplained deranged** liver function
- **Severe acute** hepatitis / **acute-on-chronic liver failure**
- **Virological breakthrough** in patients receiving antiviral treatment
- **Abnormal AFP**

Stratification of CHB patients & bidirectional referral

Hepatology
Subgroups of CHB patients requiring specialist care

Primary care
Stable CHB patients

Criteria for referral **from hepatology to primary care**

- CHB patients with **stable liver conditions over the past year**
  - **Absence of symptoms** and signs of advanced liver disease **and**
  - **Normal ALT and AFP**, or **stably elevated ALT** (< 3x ULN) after exclusion of other causes **and**
  - **No change in antiviral medication and**
  - **Absence of advanced fibrosis** (LSM < 9 kPa) with fibrosis assessment within 3 years