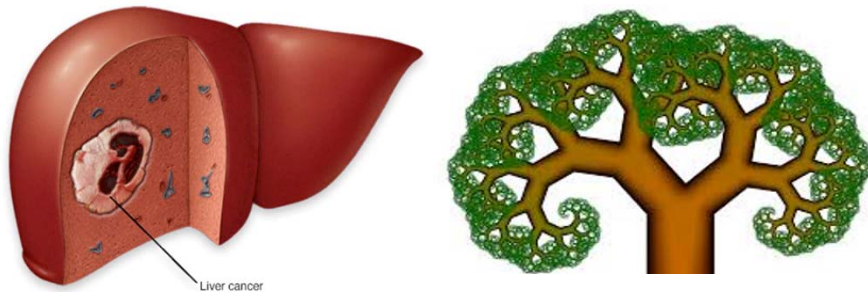


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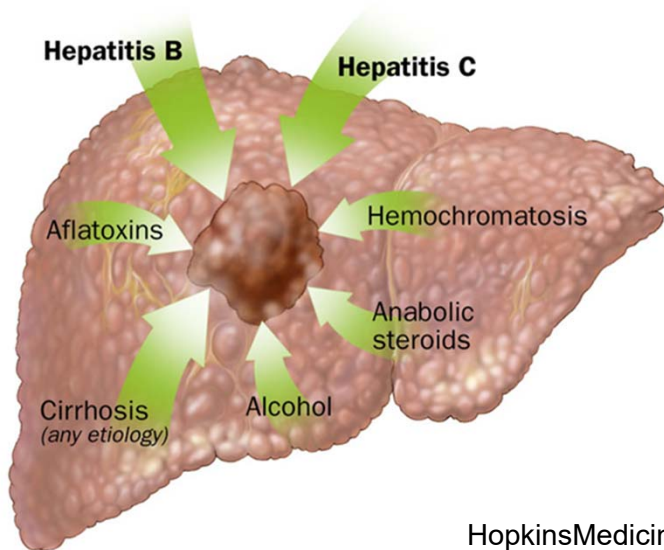
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What Is HCC?



- Liver cancer is the growth and spread of unhealthy cells in the liver that can spread within the liver and to other organs
- Hepatocellular carcinoma (HCC) is the most common type of liver cancer that arises from liver cells called hepatocytes (**leaves**)
- Cholangiocarcinoma is the second most common type of liver cancer arising from cells which make up bile ducts (**branches**)

What Causes HCC?



HopkinsMedicine.org

- The major risk factor for HCC is the development of advanced scarring of the liver, or cirrhosis, which happens from chronic hepatitis from a variety of diseases and exposures
- Chronic viral hepatitis (B and C) can lead to HCC without cirrhosis
- Central obesity, smoking, and alcohol use also increase risk, especially in patients who already have underlying cirrhosis

References: <https://liverfoundation.org/for-patients/about-the-liver/diseases-of-the-liver/liver-cancer/>; <https://www.mayoclinic.org/diseases-conditions/hepatocellular-carcinoma/cdc-20354552>

Can We Prevent And Screen For HCC?

SYMPTOMS

- Early HCC frequently has no symptoms -Goal is to diagnose PRIOR to symptoms
 - Weight loss, fatigue, abdominal pain or swelling, weakness, fever, jaundice

PREVENTION

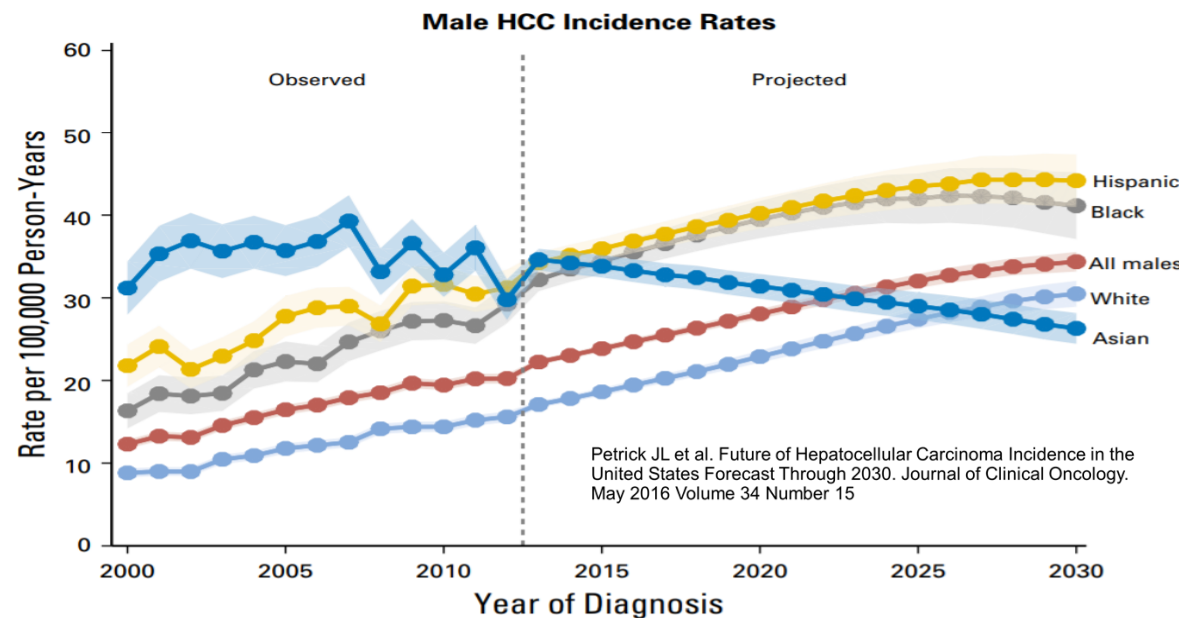
- Treatment of known liver disease to prevent development of cirrhosis
- Maintain a healthy lifestyle and body weight, including weight loss if obese
- Smoking and alcohol cessation
- Vaccination or treatment of hepatitis B, diagnosis and treatment of hepatitis C

SCREENING

Liver ultrasound, CT scan, or MRI every 6 months in high risk patients:

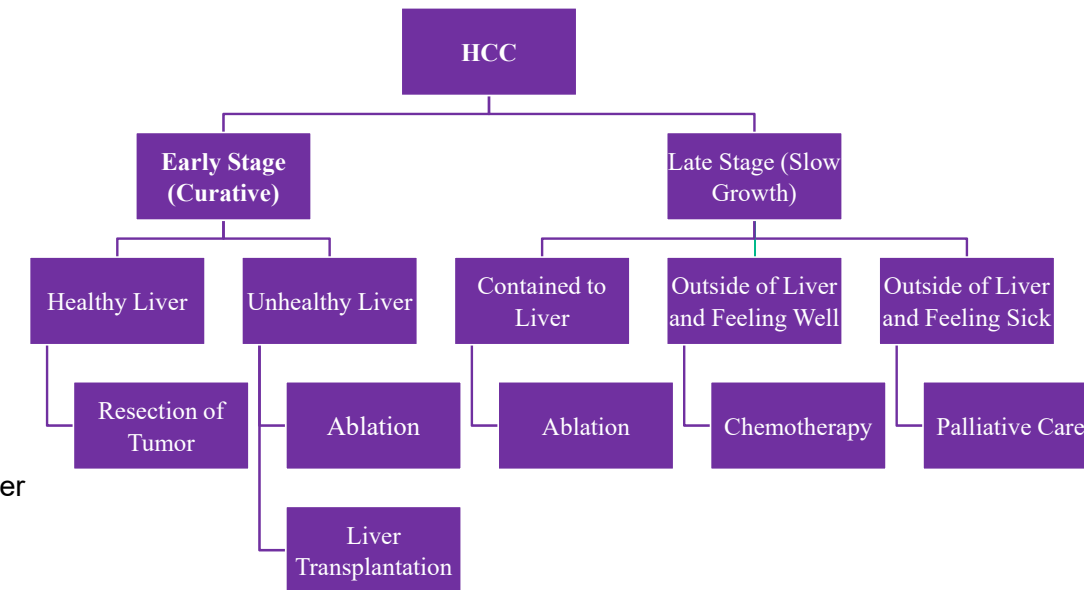
- Liver cirrhosis from any cause
- Hepatitis B and one or more of the following apply: are Asian or African, have liver cirrhosis, or have a family history of liver cancer
- Hepatitis C infection and liver cirrhosis
- Primary biliary cholangitis and Primary sclerosing cholangitis

How Common Is HCC?



- Death rates from HCC increased 43% for Americans from 2000 2016 (July 2018). This is due to more people developing HCC from:
 - Hepatitis C (especially in baby boomers: born 1945- 1965)
 - Obesity
 - Alcohol
- HCC rates are expected to rise over the next decade in all demographic groups except in the Asian population due to the control of Hepatitis B

What Are The Treatments For HCC?



What Are Curative Therapies For HCC?

RESECTION

- Remove only the tumor while the rest of liver stays in place

LIVER TRANSPLANT

- Remove entire liver with tumor and put in a new healthy liver
- Includes Living donor liver transplant (LDLT)

ABLATION

- An interventional radiology guided procedure to burn the tumor
- An option for 1 tumor less than 3cm in size

