

LIVER CANCER PREVENTION AND SCREENING

Cancer Prevention Series 7

The liver is a very important metabolic organ located on the upper right part of the abdomen.

Liver cancer will develop when the liver cells begin to mutate and divide uncontrolledly.

The most common primary liver cancer is hepatocellular carcinoma which accounts for about 90% of all liver cancer cases in Hong Kong.

Am I at risk of liver cancer?

Major risk factors for liver cancer include:

- Chronic infection with hepatitis B virus (HBV) or hepatitis C virus (HCV)
- Cirrhosis
- Metabolic dysfunction-associated fatty liver disease (formerly named as non-alcohol fatty liver disease)
- Alcohol consumption
- Consumption of food contaminated with aflatoxins (such as mouldy peanuts and grains)
- Diabetes mellitus
- Obesity
- Smoking
- Family history of liver cancer





What are the common symptoms of liver cancer?

Symptoms of liver cancer in its early stage are not obvious and may not be easily noticed. As the tumour grows, patient may have the following symptoms:

- Pain in the right side of upper abdomen
- Pain in the right shoulder
- Loss of appetite and weight, nausea and drowsiness
- Lumps in the upper abdomen
- Yellow skin and eyes, itchy skin
- Tea-colour urine and light grey stools
- Ascites (collection of fluid in the abdomen)

You should consult a doctor as soon as possible if you develop any of the above symptoms.

How to reduce the chance of getting liver cancer?

- Vaccinate against HBV 
- Take preventive measures such as practising safer sex, never sharing needles or syringes, to prevent HBV or HCV infection
- Avoid alcohol consumption 
- Do not smoke or quit smoking 
- Maintain a healthy body weight and waist circumference through a balanced diet and regular physical activity 
- Avoid food source possibly of aflatoxins, such as mouldy peanuts and grains
- People with chronic HBV or HCV infection are recommended to consult their doctors periodically to determine whether antiviral treatment is needed



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What is liver cancer screening?

The purpose of liver cancer screening is to detect liver cancer before it gives rise to symptoms, so that early treatment can be initiated. Two common screening tests for liver cancer are:

- **Alpha-fetoprotein (AFP) test:** As liver cancer cells grow, the AFP level in the blood may increase. However, AFP level may remain normal in early-stage liver cancer patients, and other liver diseases may also cause elevated AFP levels. Therefore, relying solely on AFP results may not be entirely reliable.
- **Abdominal ultrasound:** Ultrasound uses sound wave reflection to produce images of the liver and other structures in the abdomen, but small liver tumours may not be detected. Image clarity can be affected by various factors such as abdominal fatness.

Combining ultrasound with AFP test can improve the accuracy of liver cancer screening.

Should I get screened for liver cancer?

Based on local epidemiology and overseas evidence, the Government's Cancer Expert Working Group on Cancer Prevention and Screening makes the following recommendations to the local population regarding liver cancer prevention and screening/surveillance:

Prevention

- Universal hepatitis B vaccination to newborns is effective in preventing chronic hepatitis B virus infection.
- All individuals are recommended to adopt a healthy lifestyle (including no smoking, avoid alcohol consumption, have regular physical activities and healthy diet to maintain healthy body weight) as well as avoid food source of aflatoxins.
- People with chronic hepatitis B virus (HBV) or hepatitis C virus (HCV) infection are recommended to seek medical advice periodically to determine whether antiviral treatment is needed.

For asymptomatic population at average risk

- Routine screening for liver cancer, including ultrasound or alpha-fetoprotein (AFP) testing, is NOT recommended for asymptomatic population at average risk.

For asymptomatic persons at increased risk

- Persons with chronic HBV, HCV infection or liver cirrhosis regardless of the cause are at increased risk of hepatocellular carcinoma. Persons at increased risk should seek advice from doctors regarding regular surveillance every 6 months with ultrasound and AFP testing.