



# LIVER CANCER PREVENTION AND SCREENING

Cancer Prevention Series 7

The liver is the largest organ inside the body. It is a very important metabolic organ and continuously break down harmful substances e.g. alcohol, drugs, etc. inside human body. The organ is situated in the upper right part of the abdomen.

Liver cancer results from abnormal growth of liver cells. The most common liver cancer is Hepatocellular Carcinoma (HCC) which accounts for over half of all liver cancer death cases locally.

## Am I at risk of liver cancer?

The major risk factors for liver cancer include:

- Chronic infection with hepatitis B virus (HBV) and hepatitis C virus (HCV)
- Cirrhosis
- Alcohol consumption
- Ingestion of food contaminated with aflatoxin (a toxin found in some food, such as mouldy peanuts and grains)

Other risk factors include diabetes, obesity, smoking and certain hereditary conditions such as haemochromatosis, glycogen storage disease and Wilson's disease.

## What are the common symptoms of liver cancer?

Early stage of liver cancer usually has no symptoms and may not be easily noticed.

Common symptoms include unexplainable weight loss, yellowing of skin and eye, nausea, dark urine, pale stool, abdominal pain and swelling.

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
- Avoid alcohol consumption 
- Avoid smoking 
- Practise safer sex
- Do not share needles 
- Avoid food source possibly tainted with aflatoxins, particularly mouldy looking peanuts and grains
- Maintain healthy diet and body weight

Two common tests used for this purpose are:

• **Alpha-fetoprotein (AFP) test:** When liver cancer cells grow continuously, the blood AFP level may increase. However, blood AFP level is frequently normal during early stage and thus may not be reliable for detecting small liver cancer. On the other hand, blood AFP level can also be raised in conditions other than liver cancer.

• **Abdominal ultrasound (USG):** Ultrasound uses reflected sound waves to produce an image of the organs and other structures in the upper abdomen including liver. However it may not be able to detect small liver tumour. Its performance is affected by various factors such as abdominal fatness. It may be used in conjunction with AFP test to give more informative results.

## What is liver cancer screening?

The purpose of liver cancer screening is to detect liver cancer early well before development of symptoms so as to maximise benefit of early treatment.

## Should I get screened?

Routine liver cancer screening is not recommended for persons at average risk.

People with chronic HBV infection, chronic HCV infection or liver cirrhosis are at **increased risk** of liver cancer. Depending on certain criteria such as age, family history, presence of cirrhosis and other clinical parameters, some subgroups are at higher risk and should consider receiving periodic cancer surveillance (e.g. every 6–12 months) with AFP and USG. People with chronic HBV and HCV infection, or liver cirrhosis should thus seek advice from doctors to determine their need for and approach of cancer surveillance.



Department of Health