

PREVENTION



Getting vaccinated
for Hepatitis B



Not engaging in
unprotected sex



Avoiding body
piercing and
tattooing



Not abusing drugs or
sharing intravenous
drug needles



Limiting alcohol
intake



Chronic carriers of
Hepatitis B virus and
Hepatitis C carriers are
advised to consider
regular screening

GETTING SUPPORT

For more information, please visit the Centre for Health Activation, located at Level 1 of TTSH Atrium. Alternatively, you may call us at 6357 8018 during office hours (Mon – Fri, 9.30am – 4.30pm).

Clinics 2A and 2B

TTSH Medical Centre, Level 2

Contact:

6357 7000 (Central Hotline)



Scan the QR Code with your smart phone
to access the information online or visit
<http://bit.ly/TTSHHealth-Library>

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DEPARTMENT OF GENERAL SURGERY

LIVER CANCER

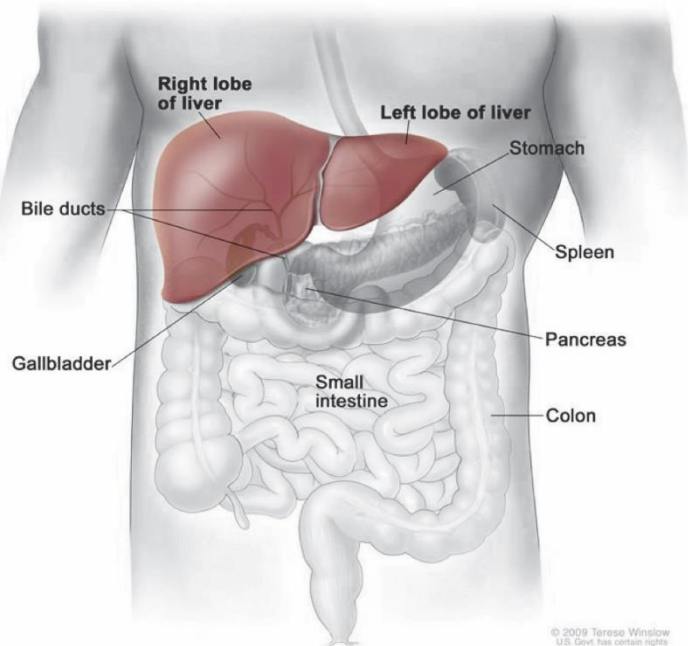


WHAT IS LIVER CANCER?

Primary liver cancer refers to cancer originating from the cells of the liver. It is classified based on the type of cells affected by cancer:

- Hepatocellular carcinoma starts in the liver cells which are called hepatocytes
- Cholangiocarcinoma or bile duct cancer begins in the bile ducts
- There are many other rare forms of liver cancer

Metastatic liver cancer refers to cancer that has spread from other organs such as colon, lung, breast and stomach to the liver. Metastatic liver cancer is more common than primary liver cancer.



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Source: <http://www.cancer.gov/publishedcontent/syndication/4564.htm>

CAUSES

The risk of liver cancer is increased in:

- Chronic carriers of Hepatitis B virus and Hepatitis C virus
- Those with liver cirrhosis (liver hardening)
- Those with a bile duct disease called primary sclerosing cholangitis
- Heavy alcohol drinkers and alcohol abusers (alcohol abuse can lead to liver cirrhosis)
- Those with exposure to Aflatoxin which is produced by a mould found on nuts, corn and grains
- Those with a family history of liver cancer

SYMPTOMS

Early stage liver cancer may not have any signs. As the cancer advances to a later stage, it may produce the following symptoms:

- Loss of appetite and weight
- Weakness and fatigue
- Nausea and vomiting
- Abdominal swelling/bloated
- Lump in the abdomen
- Abdominal pain
- Yellowish discoloration of the skin and whites of eyes (jaundice)

DIAGNOSIS

- **Ultrasound** (Scan)
- **Computerised Tomography** (CT) and **Magnetic Resonance Imaging** (MRI)
- **Liver Biopsy:**
A procedure where a small sample of tissue is taken to be examined under the microscope.

Blood Tests:

Test for the presence of a cancer marker called alphafetoprotein (AFP). It is important to note that AFP levels may be normal even in the presence of liver cancer, or elevated in patients without liver cancer, and hence it is NOT used to make a diagnosis.

TREATMENT

Some of the treatment options available include:

- **Surgical** removal of the tumour
- **Liver Transplantation**
- **Local Ablative Therapies (LATs)**
There are various techniques for LAT. They provide targeted destruction of the liver tumours under imaging guidance. Examples include inserting a special needle with microwave, radiofrequency or freezing properties to destroy tumours in a targeted area. LATs are more effective on smaller tumours.
- **TransArterial Chemo Embolisation (TACE) :**
TACE involves injecting chemotherapy agents into the blood vessel supplying blood to the tumour and blocking it off with beads or particles to deprive the tumour of nutrition.
- **Selective Internal Radiation Therapy (SIRT):**
Radioactive particles are delivered directly via a catheter (a thin, flexible tube) in the blood vessel to the liver tumour to destroy the cancer cells.
- **Chemotherapy or Immunotherapy:**
The use of anti-cancer drugs to destroy cancer cells or to stop them from multiplying.