Primary liver cancer

The human body is made up of many types of cells that grow and divide, millions of times a day, to keep the body healthy. Cancer develops when this normal process of cell reproduction is disrupted.

Liver cancer occurs when abnormal cells within the liver grow in an uncontrolled way. There are two main types of liver cancer; primary liver cancer which starts in the liver, and secondary liver cancer, which starts elsewhere in the body but spreads to the liver. Hepatocellular carcinoma is the most common type of primary liver cancer. Wherever the term ‘primary liver cancer’ is mentioned in this fact sheet, it is referring to hepatocellular carcinoma. Primary liver cancer has recently become one of the top ten causes of cancer death in Australia.

What does the liver do?

The liver is the largest organ in your body and is responsible for many important functions that keep you alive and healthy. The liver is located in the upper right side of the belly.

The liver:
- removes toxins (from food, drugs and alcohol)
- stores iron and other important chemicals and vitamins
- produces bile (used to break down food)
- helps break down the food you eat, taking in nutrients and converting some into energy
- helps fight infections
- assists in breaking down worn out red blood cells
- makes clotting factors, which help to control bleeding.

What are the common causes of liver cancer?

Liver cancer usually develops in a liver that is damaged or scarred. This is called cirrhosis.

Many people assume that liver cirrhosis can only be caused by drinking too much alcohol. However, chronic viral hepatitis (which includes hepatitis B and C infection) is also a common cause of cirrhosis.

Other causes of cirrhosis include:
- non-alcoholic fatty liver disease
- auto-immune hepatitis
- exposure to certain toxins
- lifestyle factors other than drinking too much alcohol, such as obesity and type 2 diabetes.

When a person develops cirrhosis, they are at a higher risk of developing liver cancer. People who have chronic hepatitis B can also develop liver cancer without having cirrhosis.

Primary liver cancer and chronic hepatitis B

Primary liver cancer is increasing in Australia with about 1400* people diagnosed each year. Liver cancer is more common in men and there is a strong link between primary liver cancer and hepatitis B.

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Working together to lessen the impact of cancer

What are the symptoms of liver cancer?
Many people experience no symptoms in the early stages of liver cancer. This means that by the time most people go to the doctor and are diagnosed, the cancer has grown to an advanced disease stage, and treatment options are very limited. Other people experience general symptoms, which may not seem serious enough to consult a doctor for.

General symptoms include:
• tiredness
• weight loss
• decreased appetite
• swelling of the belly or legs
• stomach pain or discomfort.

Less common symptoms include:
• pale faeces (bowel motions)
• dark urine
• itching
• jaundice (yellowing of the skin and whites of the eyes)
• pain felt across the upper right side of the belly, sometimes also in the tip of the right shoulder (tracking along the nerve supply).

How is liver cancer diagnosed?
There is more than one way for a doctor to detect signs of liver cancer. Physical check-ups, liver ultrasounds and blood tests are common ways to first check if something is wrong.

In people who have a high risk of getting liver cancer, a liver ultrasound and blood test should be done every six months. The ultrasound provides an image of the liver and can identify problems with its structure, which may need further testing. The blood test provides more information by measuring the level of a protein that is usually high in people with liver cancer.

If you have a physical check-up, liver ultrasound or blood test that suggests cancer, your doctor will refer you to a liver specialist doctor.

Other tests are commonly needed to confirm if liver cancer is present, find where exactly the cancer is, and see if it has spread to other parts of the body. These include:
• Further blood tests.
• A computed tomography (CT or CAT) scan.
• A magnetic resonance imaging (MRI) scan.
• A liver biopsy. This is the removal of a very small piece of liver tissue that can then be tested in a laboratory for the presence of cancer.

If you need any of the above tests you will be given more information and the chance to ask questions when you see your liver specialist.

How is liver cancer treated?
Not everyone will be treated for liver cancer in the same way. Treatment will depend on the size and spread of the cancer, as well as other factors, like your age and general health.

For more information on liver cancer treatment, visit the Cancer Council NSW website at: www.cancercouncil.com.au/liver-cancer/treatment/

Liver cancer and chronic hepatitis B
Hepatitis B is a common viral infection carried in the blood and body fluids that infects and damages the liver. The virus can be spread in a few ways, like having sex or sharing needles. The infection can be acute (short-lived) or chronic (long-lasting). Chronic hepatitis B (CHB) is the most common cause of liver cancer worldwide.

CHB is usually the result of infection acquired in infancy or childhood. The most common way that hepatitis B is spread is from mother to baby during birth. However, it can also spread from person to person through contact with infected body fluids.

Hepatitis B infection is very common in South East Asia and Africa. In fact, almost a third of people living in China have hepatitis B. As a result, the rate of liver cancer in these areas is also very high.

In Australia, CHB is the most common cause of liver cancer in Aboriginal and Torres Strait Islander people and also in people who were born in Vietnam, China, Indonesia, Korea, Hong Kong and Macau.

There are rarely any symptoms of CHB, and most people are unaware they have the infection. Once diagnosed, it is important to visit your doctor for regular blood tests and ultrasounds to monitor the disease and avoid damage to your liver which may lead to cancer.

For more information on liver cancer go to: cancerinstitute.org.au