

## What is liver cancer?

Liver cancer occurs when abnormal cells within the liver grow in an uncontrolled way.

The liver is located in the upper right side of the abdomen, inside the rib cage. It is one of the largest organs in the body. The liver is responsible for filtering waste products from the blood, making bile to help digest fats, and storing sugar, which the body uses for energy.<sup>1</sup>

## What are the different types of liver cancer?

There are two main types of liver cancer. These are named after the part of the liver in which the cancer first develops.

- ▶ The most common type of liver cancer starts in the main cells of the liver.<sup>2</sup> This is called hepatocellular carcinoma.<sup>2</sup>
- ▶ Cholangiocarcinoma begins in cells that line the bile duct.<sup>2</sup>

## What are the symptoms of liver cancer?

The most common symptoms of liver cancer are:<sup>1</sup>

- ▶ a feeling of discomfort on the upper right side of the abdomen
- ▶ a hard lump on the right side of the abdomen, below the rib cage
- ▶ pain in the upper back, around the right shoulder blade
- ▶ unexplained weight loss
- ▶ yellowing of the skin and the whites of the eyes – this is called jaundice
- ▶ unusual tiredness
- ▶ loss of appetite and/or nausea.

There are a number of conditions that may cause these symptoms, not just liver cancer. If any of these symptoms are experienced, it is important that they are discussed with a doctor.

## What are the risk factors for liver cancer?

A risk factor is any factor that is associated with an increased chance of developing a particular health condition, such as liver cancer. There are different types of risk factors, some of which can be modified and some which cannot.

It should be noted that having one or more risk factors does not mean a person will develop liver cancer. Many people have at least one risk factor but will never develop liver cancer, while others with liver cancer may have had no known risk factors. Even if a person with liver cancer has a risk factor, it is usually hard to know how much that risk factor contributed to the development of their disease.

While the causes of liver cancer are not fully understood, there are a number of factors associated with the risk of developing the disease. These factors include:

- ▶ chronic hepatitis B infection,
- ▶ chronic hepatitis C infection<sup>1-3</sup>
- ▶ a family history of both hepatitis B and liver cancer<sup>2</sup>
- ▶ cirrhosis of the liver<sup>1-3</sup>
- ▶ obesity.<sup>1</sup>

## How is liver cancer diagnosed?

A number of tests will be performed to investigate symptoms of liver cancer and confirm a diagnosis. Some of the more common tests include:

- ▶ a physical examination<sup>1</sup>
- ▶ examination of a blood sample<sup>1</sup>
- ▶ imaging of the liver and nearby organs, which may include ultrasound, computed tomography (CT) scans or magnetic imaging resonance (MRI)<sup>1,3</sup>
- ▶ examination of the inside of the abdomen using a laparoscope (a thin tube with a light on the end)
- ▶ taking a sample of tissue (biopsy) from the liver for examination under a microscope.

## Treatment options

Treatment and care of people with cancer is usually provided by a team of health professionals – called a multidisciplinary team.

Treatment for liver cancer depends on the stage of the disease, the severity of symptoms and the person's general health. Treatment options can include surgery, radiotherapy, chemotherapy and/or targeted therapies to destroy cancer cells.

Research is ongoing to find new ways to diagnose and treat different types of cancer. Some people may be offered the option of participation in a clinical trial to test new ways of treating liver cancer.

### Finding support

People often feel overwhelmed, scared, anxious and upset after a diagnosis of cancer. These are all normal feelings.

Having practical and emotional support during and after diagnosis and treatment for cancer is very important. Support may be available from family and friends, health professionals or special support services.

In addition, State and Territory Cancer Councils provide general information about cancer as well as information on local resources and relevant support groups. The Cancer Council Helpline can be accessed from anywhere in Australia by calling **13 11 20** for the cost of a local call.

More information about finding support can be found on the Cancer Australia website [www.canceraustralia.gov.au](http://www.canceraustralia.gov.au)

### References

1. National Cancer Institute. Liver cancer treatment (PDQ) – patient version. Available from <http://www.cancer.gov/cancertopics/pdq/treatment/adult-primary-liver/Patient/page1> [Accessed July 2012].
2. National Cancer Institute. Liver cancer treatment (PDQ) – health professional version. Available from <http://www.cancer.gov/cancertopics/pdq/treatment/adult-primary-liver/HealthProfessional/page2> [Accessed July 2012].
3. Ryder SD. Guidelines for the diagnosis and treatment of hepatocellular carcinoma (HCC) in adults. *Gut* 2003; 52(Suppl 3): 1–8.

