# Liverpool University Hospitals

Patient information

### Cirrhosis

**Digestive Diseases Care Group** 

#### Cirrhosis

Cirrhosis is a serious condition where normal liver tissue is replaced by scar tissue (fibrosis). It tends to progress slowly and often does not cause symptoms in its early stages. However, as the function of the liver gradually becomes worse, serious problems can develop.

In the UK, the two common causes of cirrhosis are heavy alcohol drinking and hepatitis C infection. Treatments may vary, depending on the cause. If cirrhosis becomes severe, a liver transplant may be the only option.

#### What does the liver do?

## The liver is in the upper right part of the tummy (abdomen). It has many functions which include:

- Storing fuel for the body (glycogen) which is made from sugars. When required, glycogen is broken down into glucose which is released into the bloodstream.
- Helping to process fats and proteins from digested food.
- Making proteins that are essential for blood to clot (clotting factors).
- Processing many medicines that you may take.
- Helping to remove or process alcohol, poisons and toxins from the body.
- Making bile which passes from the liver to the gut and helps to digest fats.

#### What is cirrhosis?

Cirrhosis is a condition where normal liver tissue is replaced by scar tissue (fibrosis). The 'scarring' tends to be a gradual process. The scar tissue affects the normal structure and regrowth of liver cells. Liver cells become damaged and die as scar tissue gradually develops. Therefore, the liver gradually loses its ability to function well. The scar tissue can also affect the blood flow through the liver which can cause back pressure in the blood vessels which bring blood to the liver. This back pressure is called portal hypertension.

#### What causes cirrhosis?

#### There are many causes of 'scarring' of the liver (cirrhosis). In the UK;

- Alcohol excess
- Hepatitis C
- Hepatitis B
- Autoimmune liver disease
- Non-alcoholic fatty liver disease
- Severe heart failure
- Inherited diseases
  - Genetic haemochromatosis
  - o Wilson's disease

#### What are the symptoms of cirrhosis?

In the early stages of the condition, often there are no symptoms. You can get by with a reduced number of working liver cells. However, as more and more liver cells die and more and more scar tissue (fibrosis) builds up, the liver:

- Fails to make enough proteins such as albumin that help to regulate the fluid composition in the bloodstream and body – can develop ankle swelling and fluid in the abdomen (ascites).
- Fails to make enough chemicals needed for blood clotting bruise easily.
- Is less able to process waste chemicals in the body such as bilirubin. So, these may build up in the body – yellowing of the whites of the eyes and skin (jaundice).
- Is less able to process medicines, toxins and other chemicals which may then build up in the body.- can cause confusion and disorientation (encelphalopathy).

#### How is cirrhosis diagnosed?

A doctor may suspect, from your symptoms and a physical examination, that you have 'scarring' of the liver (cirrhosis). (For example, a doctor may detect your liver is enlarged or you are retaining fluid.) A doctor may especially think of cirrhosis as a cause of your symptoms if you have a history of heavy alcohol drinking or have had a previous episode of hepatitis.

#### Tests used to diagnose cirrhosis;

- Blood tests may show abnormal liver function.
- Ultrasound scan (or a CT scan or MRI scan) may show you have a damaged liver.
- Liver biopsy which is a small sample (biopsy) of the liver to be looked at under the microscope.
- Transient elastrography (fibroscan) which is a non-invasive way of assessing for liver stiffness.

If the underlying cause of the cirrhosis is not clear, further tests may be done to clarify the cause.

#### What is the treatment for cirrhosis?

'Scarring' of the liver (cirrhosis) tends to get progressively worse if the underlying cause persists and is not treated. In general, once the damage is done the scarring is not able to reverse. Therefore, the aim of treatment is, if possible, to prevent further liver scarring or to slow the progression of the scarring process.

#### Treatment to ease symptoms and prevent complications

Various treatments may be advised, depending on the severity of the cirrhosis and the symptoms that develop.

#### For example:

- Adequate food intake (including calories and protein) and regular exercise are important to prevent excessive weight loss and muscle wasting.
- A low-sodium diet or 'water' tablets (diuretics) to reduce fluid accumulating in the body.
- Medicines to reduce itch.
- Vaccination to protect against hepatitis A, influenza and pneumococcal infections.
- 'Thinning' of the bones (osteoporosis) may occur and so prevention and treatment of osteoporosis are important.
- Medicines that may help to reduce portal hypertension.
- Drainage of fluid that builds up in the tummy (abdomen) called ascites.

#### What is the outlook (prognosis)?

The outlook depends on factors such as the underlying cause, how early the condition is diagnosed, and how early treatment is given. Many people who have 'scarring' of the liver (cirrhosis) which is not too extensive live a normal life for a number of years. In some cases, the progression of the cirrhosis can be halted or slowed by treatment. The outlook is not so good if there is a lot of liver damage, especially if you have alcoholic cirrhosis and do not stop drinking.

There is also an increased risk of developing serious infections.

If you have cirrhosis, you have an increased risk of developing cancer of the liver (hepatocellular carcinoma) and you will require regular ultrasound scans of the liver.

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Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

#### Further help and information

Hepatology Specialist Nurses Tel: 0151 706 2805 Text phone number: 18001 0151 706 2805

British Liver Trust 6 Dean Park Crescent, Bournemouth, BH1 1HL Tel: (Information Line) 0800 652 7330 (General) Tel: 01425 481320 Web: www.britishlivertrust.org.uk

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