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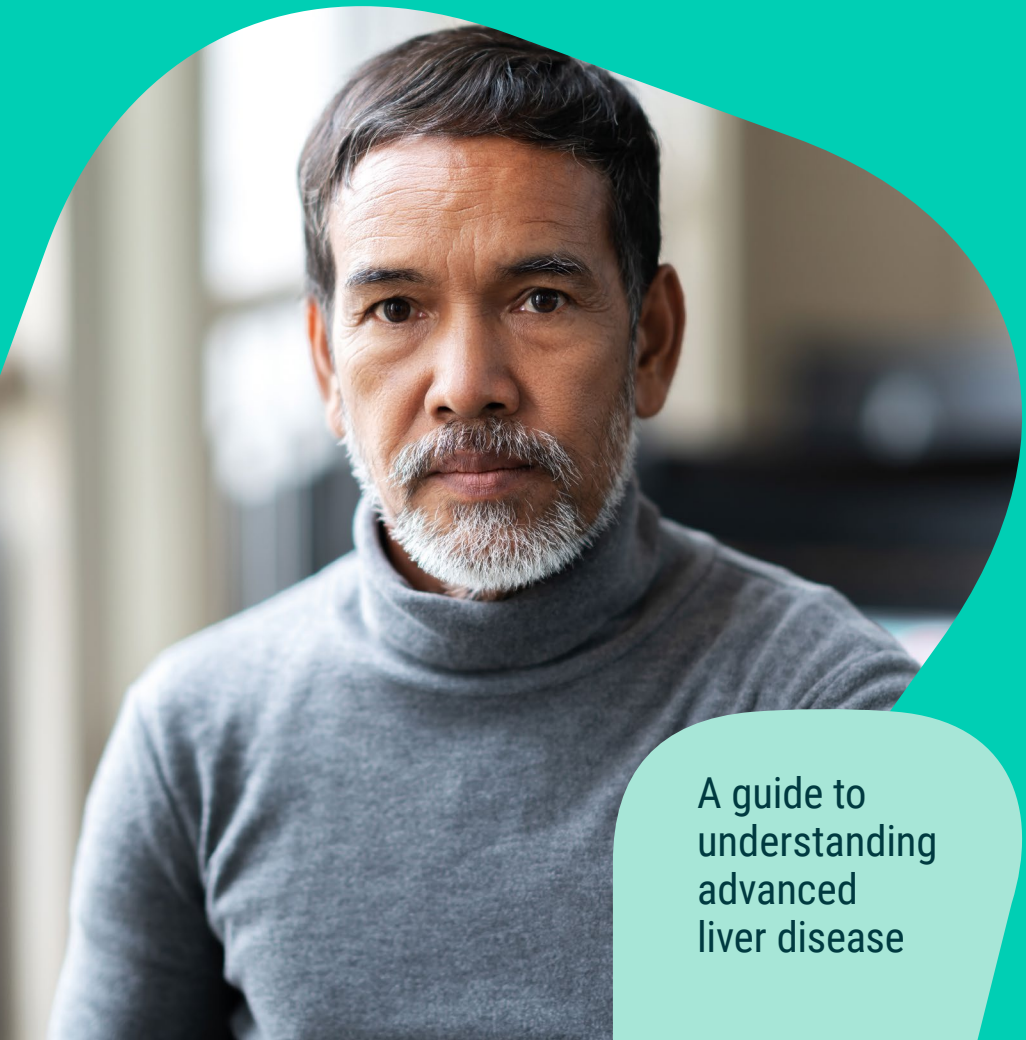
Ascites

– swelling of your belly with fluid



A guide to understanding advanced liver disease

Contents

Welcome

Welcome to your guide to understanding **ascites** or bloating or swelling of the belly with fluid. It often develops in people with advanced liver disease (sometimes referred to as '**decompensated cirrhosis**').

Unusual or medical words are highlighted in bold and explained in the glossary at the end of this booklet.

This booklet is one of a series about living with advanced liver disease. The other booklets include **decompensated cirrhosis**, **varices and bleeding**, and **hepatic encephalopathy (HE)** or brain fog.

Visit our website to read and download all our information on cirrhosis.

Use this QR code to view our resources or visit **www.liveruk.org/cirrhosis**

How to say it:
ah-SY-tees

What is liver cirrhosis?

Advanced liver disease and cirrhosis can have several causes including drinking too much alcohol, viral infection such as **hepatitis B or C**, **metabolic** diseases such as **metabolic dysfunction-associated steatotic liver disease (MASLD)**, or other conditions such as autoimmune hepatitis.

These things all injure the liver. It repairs itself by replacing damaged cells with new ones. This usually works well but, when too much damage occurs or lasts a number of years, some of this repair work can leave scars (fibrosis). Having a lot of severe scars in your liver is known as **cirrhosis**. At this point, if care is taken, the liver can usually cope with the damage and maintain its important functions. During this period, which can last years, there can be very few symptoms or even none at all.

In advanced liver disease (decompensated cirrhosis) the scarring can become so great that the liver can no longer repair itself or function properly.

This can cause linked conditions like hepatic encephalopathy, ascites, variceal bleeds or liver cancer. In this booklet, we focus on ascites.

Why can cirrhosis lead to ascites?

When the liver is scarred, it increases the pressure inside the liver's blood vessels. The increased pressure can force fluid into the abdomen. Simply put, this is what is known as ascites.

Liver damage can also make it easier for fluid to leak from blood vessels. A healthy liver makes albumin which helps stop this happening. But damaged livers tend to make less albumin. Which means blood vessels are leakier, leading to ascites.

Knowing that you have ascites can be worrying. Being well informed and following advice from professionals should help you avoid any unnecessary problems.

It's also reassuring to know you are not alone. There are lots of other people out there in a similar situation to you – ascites is a very common condition among people with advanced liver disease.

If you would like to find out more or connect with others in a similar situation to you, please contact Liver UK.

Tell me more about ascites

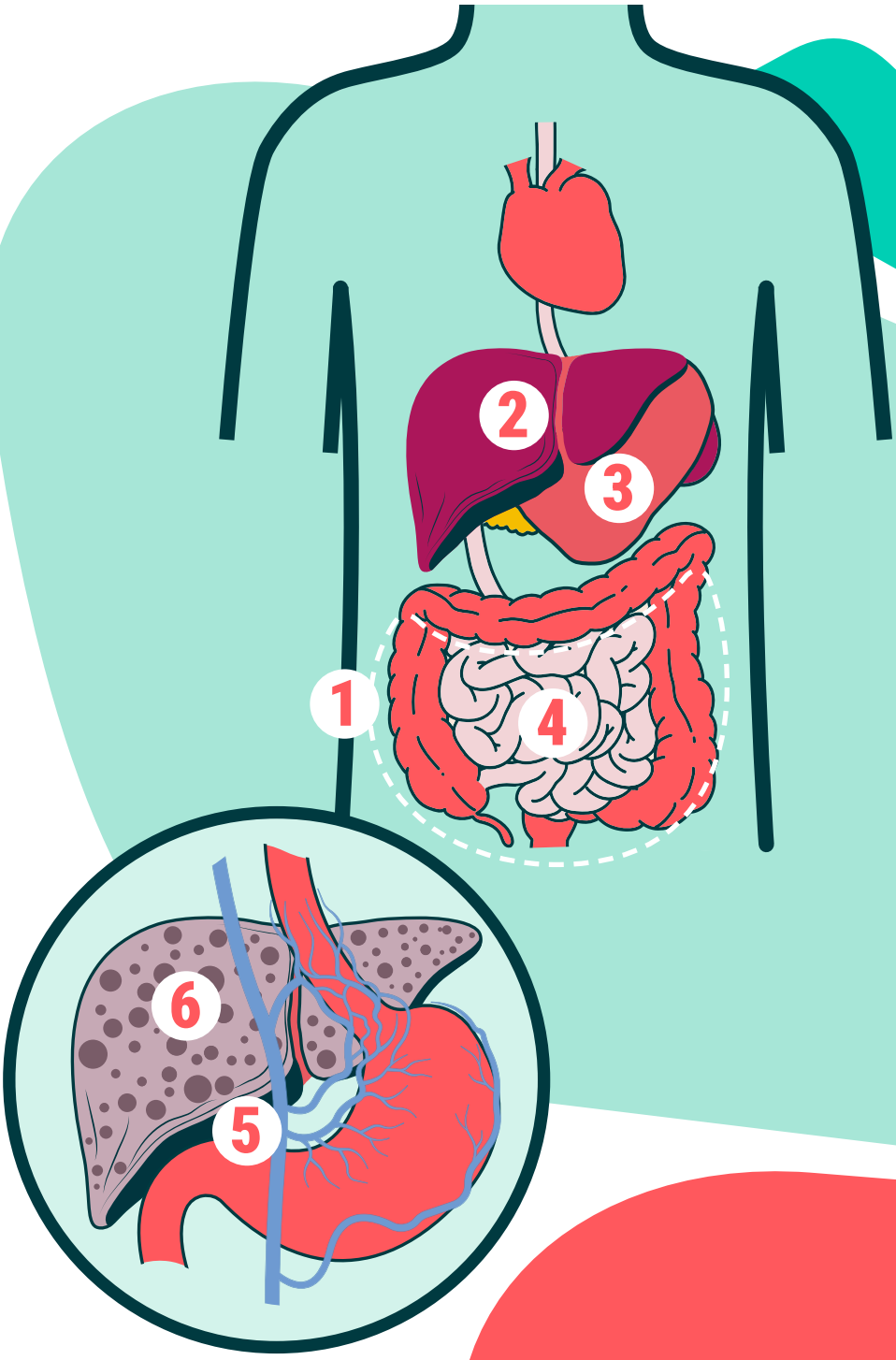
The diagram shows the **abdomen [1]** and the organs that are found inside it. The **liver [2]**, the **stomach [3]** and a number of other organs, are all held together in a casing called the **peritoneal membrane [4]**. The purpose of the membrane is to protect and support the organs and also to let them move around a little as they do their job.

In a healthy liver, some of the blood is supplied by the **portal vein [5]**. This flows directly through the liver, being cleaned and filtered, before making its way to the heart.

However, when a liver becomes damaged by **cirrhosis [6]**, blood cannot pass through it as quickly as it needs to. The pressure then starts to build up inside the liver and the veins leading into it.

When the pressure reaches a certain level, it starts to force fluid out of the liver and veins, through the peritoneal membrane, and into the abdomen.

The way your body tries to manage lasting high blood pressure in the liver can add to the problem. Changes to how it manages fluid and salt can mean your body doesn't get rid of as much of them as it should. So more fluid builds up in your abdomen, leading to ascites.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What are the main symptoms of ascites?

To begin with the build-up of fluid may be quite minor and easy to miss. If your doctor does suspect that you have ascites, they may want to confirm the diagnosis with an ultrasound or a CT scan.

However, once the swelling reaches a certain point, there are definite symptoms you or your doctor will notice.

You may feel or see new heavy, sagging weight around your middle.

Alternatively, your belly may move in an unusual wave-like motion when pushed or prodded. In the later stages of ascites your belly might feel hard or tight.

If you have any of the following symptoms, let your doctor know as they could be related to a problem in the liver:

- **A swollen or extended tummy (abdomen)**
- **Swelling in your legs**
- **Bruising easily**
- **Changes to your belly button**
- **Loss of appetite**
- **Sudden weight gain**
- **Difficulty breathing (especially when lying down)**
- **Bloating**
- **Abdominal pain**
- **Heartburn or indigestion**
- **Nausea and vomiting**
- **Fever and abdominal pain (suggesting infection)**

How is ascites treated?

Reducing salt

Your body contains a lot of water that is naturally quite salty, about the same as seawater.

If you consume a lot of salt in your diet, your body will react by keeping hold of extra water to keep the saltiness at the right level. By decreasing the salt in your diet, you will naturally lose some of this water.

Eating less salt helps reduce ascites.

Salt can find its way into your diet in all sorts of ways and some of them are not at all obvious. The following suggestions can help you take more control of salt in your diet. If you would like to know more about this, talk to your doctor, nurse, or dietitian for advice.

Here are some useful tips that are easy to follow:

- **Read the labels on the food and drink you buy. Salt, or sodium, should be clearly labelled.**
- **Try to use fresh ingredients where possible. Processed foods (ones that have been treated or manufactured) tend to be higher in salt.**
- **Avoid adding salt to your food at the table.**
- **Avoid packet and tinned soups if possible.**
- **Tinned vegetables, including baked beans, can be high in salt. Look for low-salt or no-salt versions. Frozen vegetables are lower in salt and a good alternative.**
- **Smoked and tinned fish, including salmon, tuna and pilchards that come in 'brine', contain a lot of salt. Try to eat fresh fish or try those tinned in spring water instead.**
- **Avoid cured meats – such as ham, bacon, sausages and salami. Use cold, cooked fresh meat, poultry or eggs instead.**
- **Full-fat hard cheese is an excellent source of protein, so include it in your diet but do not have it every day because it is high in salt.**
- **Bovril,® Marmite® and all yeast extracts are high in salt and so should be avoided.**
- **Choose unsalted butter.**

Read our Diet and Liver Disease booklet for detailed information and advice.

Diuretics (sometimes called water tablets)

Changing your diet will probably not be enough on its own, so sometimes your doctor will prescribe a treatment called a 'diuretic'.

Some of these work by controlling a chemical inside your body called 'aldosterone', which is responsible for keeping hold of salt in the body.

The diuretic helps remove salt from the body, and in turn lose excess water by peeing more.

It is usually best to take diuretic treatment in the morning, to avoid frequent trips to the toilet during the night.

Antibiotics

There is a risk of developing a bacterial infection in the fluid that has built up.

Your doctor might prescribe you antibiotics as a precaution.

Paracentesis

This is a method of draining off large amounts of liquid from your body. You are first given a local anaesthetic, so you are awake but you shouldn't feel any pain.

Paracentesis involves a needle being inserted into the abdomen and fluid is drawn out.

This can be done when necessary to deal with large amounts of fluid.

TIPSS

(Transjugular Intrahepatic PortoSystemic Shunt/Stent)

Here, some of the blood that would usually travel through the liver is redirected around it.

A tubular device is inserted into the liver to create an artificial connection (like a tunnel) between the vein carrying blood into the liver and the vein carrying blood out. This relieves some of the pressure on the liver and the veins leading to it, reducing the amount of fluid leaking out of them.

Can ascites be prevented?

Once the liver has developed advanced liver disease, it is quite likely to lead to ascites.

Whatever the cause of your liver disease, avoiding alcohol and cutting down on salt help prevent ascites.

Also, some of the ways of treating ascites mentioned in the previous section may help to prevent any future episodes.

Ascites can be a troublesome condition, so make sure you take all the advice and medicine prescribed to you by your doctor, exactly as instructed.

In some cases, you may be able to avoid ascites altogether if you look after your liver by being as healthy as possible.

Glossary

Abdomen: This is a space in your body (often known as the stomach or belly) that holds a number of organs, including the liver and stomach.

Ascites: A build-up of fluid in the abdomen.

Cirrhosis: A serious stage of liver disease where the liver has a lot of damage and scar tissue. This means it can no longer repair itself or grow new cells properly.

CT scan: This is a painless scan where multiple x-rays are used to create a 3D image of the inside of your body.

Decompensated cirrhosis: When the liver is so scarred and damaged it is no longer able to work properly.

Fibrosis: Scar tissue that can develop as a result of liver damage.

Hepatic encephalopathy: A change in the brain that can occur in patients with advanced liver disease due to high levels of toxins in the brain.

Hepatitis B and C: Two conditions that cause inflammation of the liver due to viral infection.

Hepatocellular carcinoma: A type of liver cancer. Cirrhosis increases the chance of developing this condition.

Liver: The largest organ inside the human body. Among other things it removes toxins from our blood, produces hormones, and helps control blood sugar.

Metabolism: How the body produces, uses and stores energy from food.

Peritoneal membrane: A thin layer of tissue covering the abdominal organs.

Metabolic dysfunction-associated steatotic liver disease (MASLD): MASLD is when you get a build-up of fat in your liver.

Portal vein: A large vein carrying blood from the stomach and gut to the liver for cleaning.

Stomach: The organ in which most of the food and liquid we consume is digested.

Toxins: Harmful chemicals that can enter the body through our normal daily activities such as eating, drinking and breathing. A healthy liver helps to remove toxins from the body.

Ultrasound: This is a painless scan that uses high-frequency sound-waves to form a picture of what is happening inside your body.

Variceal bleed: When small veins (known as varices) burst, causing serious bleeding.

Varices: Small veins that have become larger, twisted and swollen due to blood being redirected to them.

Follow this QR code for a full list of medical terms and useful words

Useful resources

Advanced liver disease information suite

This booklet forms part of a suite of information for people with advanced liver disease (decompensated cirrhosis).

- **Decompensated cirrhosis**
- **Ascites – swelling of your belly with fluid**
- **Varices and variceal bleeding**
- **Hepatic encephalopathy (HE)**

Find the full information suite at:
liveruk.org/cirrhosis

How Liver UK can help

A diagnosis of liver disease can be worrying, and you may have a lot of questions. The Liver UK support team are here for you and for your family and friends.

Whether you have questions or just need someone to listen, we can help.

Find out how we can help you
liveruk.org/support

Call our nurse-led helpline
0800 652 7330

How we produce information

Feedback and information services

Your feedback is important to us and will help us improve our information. To provide feedback, email **patient-info@liveruk.org**

For more information on how our information was developed, visit our website: **www.liveruk.org**

Thanks

All our information resources are reviewed by medical experts and people living with liver disease.

We would like to thank all of the clinical and patient experts who were in involved in creating this booklet.

Disclaimer

This resource provides general information but does not replace personal medical advice. It is important to contact your medical team if you have any worries or concerns.

LIVER UK

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To make a gift in support of our work today, please scan the QR code or visit

www.liveruk.org/donate

Liver UK is the UK's leading charity dedicated to supporting adults, children and young people affected by liver disease or liver cancer. Our mission is to transform liver health by raising awareness, promoting prevention, and improving care and support for everyone affected.

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