

healthy living

De-liver protection

AS THE ORGAN THAT HELPS
CLEANSE TOXINS FROM THE BODY,
ANY INJURY OR SCARRING WILL
RESULT IN CIRRHOSIS

by Dr Gan Ing Earn

THE liver is an important organ situated below the right side of our rib cage. Its main function is to cleanse the toxins and wastes in our blood, and to manufacture vital nutrients.

Cirrhosis occurs when the liver becomes shrunken and hard with scarring. This is the result of scar tissue forming after repeated injury to the liver from chronic inflammation or diseases.

In this cirrhotic stage, the liver gradually loses its function and this condition is non-reversible.

In Malaysia, the common causes of liver cirrhosis are chronic alcohol abuse and chronic viral hepatitis infection (hepatitis B or C).

The less common causes are fat deposition in liver (fatty liver), genetic diseases that affect the transport of iron or copper which eventually leads to excessive deposition in the liver, autoimmune hepatitis, traditional herbal medication abuse, and congenital bile duct or liver diseases.

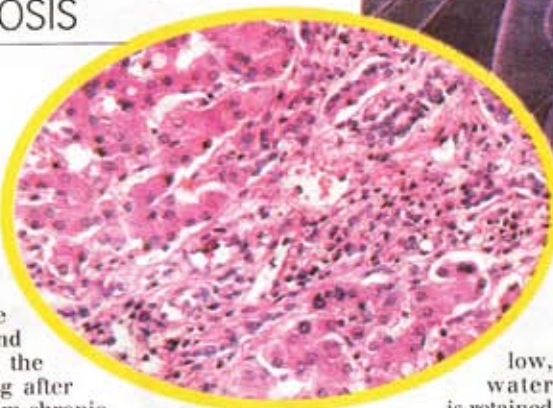
Detection

In the early stage, there are no obvious signs or symptoms. When the disease gets more advance, the following features may occur:

- » **eye** or body turns yellow;
- » **abdominal** distension (ascites) or leg swelling (oedema) from fluid accumulation;
- » **lethargy**;
- » **poor** appetite and weight loss;
- » **vomiting** or passing out blood;
- » **multiple** bruises;
- » **loss** of body hair; and
- » **swelling** of breast tissue in males.

In the cirrhotic stage, the liver will lose its ability to synthesise the protein that helps blood to clot. When the clotting factor is low, the body tends to develop bruises and bleed easily.

When albumin (a type of protein) is



low, water is retained in the body

which leads to oedema and ascites.

A hard and scarred liver will also lead to an increase in blood pressure in the vessel that leads to the liver. The resultant backward pressure from the blood flow will distend the blood vessel in the oesophagus and stomach region.

This leads to dilated and tortuous vein (varices). The shape is similar to that of the big varicose vein on the leg. If the pressure becomes too high, the vessel may burst and lead to excessive bleeding.

As the liver's ability to remove toxins decreases, the toxins accumulate in the brain causing drowsiness, hallucination, confusion and eventually unconsciousness at the end (hepatic encephalopathy).

The most dreaded complication is the development of liver cancer. Cirrhotic liver has a much higher chance of getting cancer formation compared to normal liver. For this reason, the doctor may scan the liver frequently.

Diagnosis and prevention

To diagnose liver cirrhosis, a blood test and ultrasound scanning of the liver and abdomen are performed. After confirmation of a diagnosis, further blood tests will be done to find out the cause.

If the cause cannot be identified, a liver tissue sample has to be taken for investigation.

An upper endoscopy to examine the gut is necessary to identify the presence of dilated blood vessel in the oesophagus and

treatment can be started accordingly.

There are several treatment options:

» **To** reduce water retention, medication is used to increase the rate of water excretion and the patient is advised to restrict daily salt intake. If water builds up in the abdomen and the condition no longer responds to usual treatment, a drain may be needed to be inserted directly into the abdomen to remove the fluid.

» **In** order to control the production of toxins, the patient needs to consume a moderate amount of high quality protein. Medication can be used to reduce the risk of encephalopathy.

» **Blood** pressure medication can help to reduce the pressure in the blood vessel to the liver and thereby reduce the development of varices in the oesophagus or stomach. A periodic upper endoscopy examination and banding of very dilated vein may be necessary to prevent rupture and excessive bleeding.

» **Routine** and scheduled blood tests and ultrasound scanning of the liver need to be done to monitor the progress of the disease.

You can reduce the risk of getting cirrhosis by protecting your liver. Have regular medical checkups. If you drink, drink moderately.

You should also be careful when taking supplements or traditional herbal medication. Check with medical personnel first.

Eating a healthy diet and maintaining an ideal weight may help to reduce fat deposition in liver.

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(above) A healthy liver and where it is located in the human body.

(left) Cirrhosis of the liver.

