Alcoholic Liver Disease

What does the liver do when you drink alcohol?

Alcohol is absorbed from the stomach and intestine into the blood stream; this then flows to the liver so that nutrients and toxins can be processed. The liver cells break down alcohol so it can be eliminated from the body. Some of the by products created during this process are toxic and can damage the liver. The liver can only process a certain amount of alcohol at a time and if you drink more alcohol than the liver can break down then it may damage the liver.

What are the recommended amounts of alcohol?

There seems to be a variation in the amount of alcohol that can cause liver damage between different people. It is known however that women are more at risk of the damaging effects of alcohol than men, and there is an inherited genetic link to the risk of damage from alcohol. The more you drink the more likely you are to suffer from alcohol related liver disease.

The recommended safe limits for alcohol intake are no more than 21 units for men per week (no more than 4 units per day), and 14 units per week for women (no more than 3 units per day). A unit of alcohol equates to half a pint of beer (of 3-4% proof) or a 25ml measure of spirits (40% proof). There are one and a half units in a 125ml glass of wine (12% proof) or a 35ml measure of spirits. The pattern of alcohol intake can also affect whether you are drinking within the recommended limits. Drinking three pints of standard beer, three times a week gives you a weekly intake of at least 18-20 units (almost the upper limit for a man), but means that you are drinking at least 6 units per session – more than the recommended daily intake.

Three types of disease

There are three different types of alcohol induced liver disease, they are:
Fatty liver which occurs relatively soon in almost everyone who drinks heavily. It is an accumulation of fat in the liver cells. It rarely has any symptoms and will normally resolve if there is abstinence from alcohol.

Alcoholic hepatitis is when there is inflammation present in the liver. The inflammation can range from mild to severe. There may be some symptoms such as abdominal pain, nausea, loss of appetite and jaundice. If the hepatitis is mild then it may last for years, slowly causing the liver progressive damage although this may also be reversed if alcohol is stopped. In its more severe form alcoholic hepatitis may have a sudden onset (for example after binge drinking) and can lead to liver failure.

Alcoholic cirrhosis is an irreversible condition in which healthy liver is replaced by scar tissue. Around one in ten heavy drinkers will develop cirrhosis, and if you have any other liver disease (e.g. viral hepatitis) then you are more likely to develop cirrhosis. In the early stages of cirrhosis your liver will still be able to carry out its function and you may have no symptoms, but as time goes on and more scar tissue forms the liver will no longer be able to cope and the complications are severe and life threatening, they include:

- Collection of fluid in the abdomen (ascites)
- Distended veins in the oesophagus (varices)
- Confusion and reduced level of consciousness leading to coma (encephalopathy)
- Jaundice
- Bleeding from the gullet and stomach due to enlarged veins (varices)

Although the scar tissue is permanent, liver function can stabilise if drinking is stopped and no more stresses are placed on the liver.

Treatment

The most important factor in treating alcohol induced liver disease is to stop drinking. In fatty liver disease and mild alcoholic hepatitis, abstinence and improved nutrition (possibly with vitamin supplements) may be sufficient to reverse the damage. In severe hepatitis then hospital admission may be necessary to deal with the effects of the liver damage. In cirrhosis where the liver is unable to carry out its normal functions then treatment may involve addressing the specific complications of the liver disease such as having a low salt diet, taking water tablets and possibly fluid drained from the abdomen to treat ascites, and treatment through an endoscope and blood pressure tablets to treat the varices. In some cases liver transplant may be an option for those who have cirrhosis, but to be eligible they must show understanding of the problems alcohol has caused and sign a contract regarding abstinence and close monitoring of any alcohol use before and after liver transplantation.

To find out more about the help and support available to those wishing to give up alcohol you can visit the links below:

www.alcoholics-anonymous.org.uk
www.alcoholsupport.co.uk

If you would like to know more about alcohol related liver disease then contact the Liver Unit at the Wellington Hospital on 0207 586 7156 or via e-mail at David.Morrison@HCAHealthcare.co.uk