

the liver

The liver is the largest organ in the human body and is situated in the upper right hand side of the abdomen (tummy), protected by the ribs. Although a healthy liver is important to everybody, it is especially important to people with HIV, not least because the liver plays an important part in metabolising anti-HIV medication and other drugs. Viral infections of the liver, such as hepatitis A, B and C can not only make you very ill, but can impair the ability of the liver to process medicines, as can liver damage caused by drug and alcohol use.

Functions of the liver

The liver serves three functions: it stores and filters blood, removing toxic substances from drugs, food and body waste; it makes bile, which is released into the gut to help digest fat; and it metabolises nutrients from food, releasing energy into the blood stream and storing vitamins and minerals.

Potential problems

Many people with HIV experience no problems with their liver. However, as with anybody else, heavy and sustained alcohol consumption can cause liver damage. Unchecked, this may lead to a condition called cirrhosis, a permanently scarred and damaged liver which can have serious health implications. Recreational drugs, such as ecstasy, heroin and cocaine, can also damage the liver if taken to excess.

Hepatitis means inflammation of the liver and is relatively common in people with HIV. The commonest causes are the viruses hepatitis A, B and C, which can not only cause severe ill health but can also limit HIV treatment options. Hepatitis A is spread by food or drink contaminated by human excrement containing the hepatitis A virus; and sexually from oral-anal contact (rimming). Hepatitis B is passed on from mother to child; by contact with contaminated blood; or through unprotected anal, oral or vaginal sex. Hepatitis C is a blood-borne virus which is spread via contaminated blood products; the sharing of needles and syringes for injecting drug use; from mother to child; and through unprotected anal or vaginal sex, particularly where blood is present. All blood products are now routinely screened for hepatitis C.

Some anti-HIV drugs, particularly zidovudine and zalcitabine, and other prescription medication can cause the liver to become inflamed. Extremely large doses of vitamin A can

also cause liver damage. Severe liver damage can increase the chances of developing liver cancer, which can prove fatal.

Symptoms of liver disease

Typical symptoms of liver problems include extreme tiredness, a feeling of general poor health, weight loss, loss of appetite, nausea and vomiting, fever, abdominal pain, itchy skin, and an enlarged or tender liver. Jaundice may also develop. This is easily noticeable as the skin and whites of the eyes turn yellow, urine becomes dark and stools pale.

Tests

Liver function is commonly monitored amongst people taking anti-HIV drugs. Samples of blood may be taken to check on your liver when you attend for your routine clinic appointment. Your doctor may also perform a physical examination to see if your liver is enlarged or tender.

If liver function tests are persistently abnormal, and you have symptoms of liver disease, a liver biopsy may be performed, particularly if hepatitis B or C, or liver cancer is suspected. This involves taking a small sample of the liver in a simple surgical procedure which is usually performed under local anaesthetic.

Treatments

Treatments for liver disease vary depending on the cause, but can include rest, avoidance of tea, coffee, alcohol and recreational drugs, and a change of prescription medication. Alpha interferons can be used to treat hepatitis A, B and C, as can some antiretroviral drugs. Surgery or liver transplant may be an option for advanced liver disease.

Maintaining a healthy liver

There are some simple steps you can take to protect your liver. If travelling overseas, particularly to a country with poor sanitation you should be aware that hepatitis A can be spread in shellfish, salads, raw vegetables, water and ice cubes. Ask at your HIV treatment centre about vaccinations for hepatitis A and B, particularly if you are sexually active. Using a condom will reduce the risk of contracting hepatitis viruses from anal, vaginal or oral sex. If you inject drugs, ensure that you do not share any injecting equipment. Do not drink excessive amounts of alcohol, and give your body time to recover after an episode of heavy drinking. Similarly, be aware that recreational drug use can damage your liver.

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