



National HIV Nurses Association



*NHIVNA Pre-conference Study Day*  
*'Current Issues in HIV, Hepatitis and other*  
*Blood-borne Viruses'*  
*In collaboration with BASLNF*

Royal Armouries International, Leeds

17 June 2015



17<sup>th</sup> Annual Conference of the  
National HIV Nurses Association (NHVNA)



National HIV Nurses Association

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Forum (BASLNF)

17 - 19 June 2015 - Royal Armouries International, Leeds

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National HIV Nurses Association (NHIVNA)



**Esther Pears**

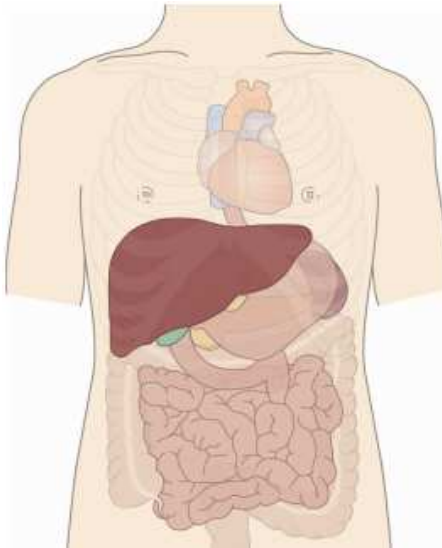
Central Manchester University Hospitals  
NHS Foundation Trust

*17 - 19 June 2015 - Royal Armouries International, Leeds*

## A Basic Introduction to Liver Disease

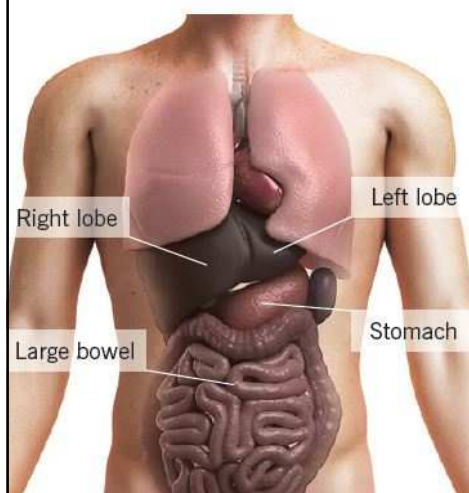
Esther A Pears  
Senior Hepatology Specialist Practitioner  
Manchester Royal Infirmary

## The Liver



- The liver is the second largest organ in the body.
- It weighs approximately 1.8kg in men & 1.3kg in women
- It holds approximately 13% (about one pint or 0.57 litres) of your total blood supply
- It is estimated to have over 500 functions.

## Where is the liver?



- If you place your right hand over the area under the ribs on the right side of your body it will just about cover the area of your liver.

## Some of the functions of the liver

- Fighting infections and illness
- Removing toxins (poisons), such as alcohol, from the body
- Controlling cholesterol levels
- Helping blood to clot (thicken)
- Releasing bile, a liquid that breaks down fats and aids digestion

## Overview

- There are more than 100 different types of liver disease.
- Together they affect at least 2 million people in the UK.
- Liver disease doesn't usually cause any obvious signs or symptoms until it's fairly advanced and the liver is damaged

## Liver Diseases

- Alcohol related liver disease
- Autoimmune hepatitis
- Budd Chiari
- Benign tumours
- Cystic disease of the liver
- Cirrhosis of the liver
- Fatty liver & NASH
- Haemochromatosis
- Hepatitis ABCD
- Liver cancer
- Primary biliary cirrhosis
- Primary sclerosing cholangitis
- Wilson's disease

There are many causes of liver disease but there are three main threats to your liver's health which you can protect yourself from:

## Alcohol related liver disease

- **Alcohol related liver disease** – where the liver is damaged after years of alcohol misuse, this can lead to cirrhosis (scarring of the liver)
- If you regularly drink more than a pint or two of beer, or a couple of glasses of wine each day, you're putting the liver under incredible strain.

## Know your units



- Women should drink no more than 2 to 3 units in a day
- Men should drink no more than 3 to 4 units in a day
- Don't save up several days 'allowance' and drink it all at once

## How alcohol hurts your liver

- A quarter of us drink at levels that could put our health at risk
- Regularly drinking more than the recommended amount over a long period can damage your liver. This can lead to alcohol related liver disease (ALD) and liver cancer

## How to look after your liver

- Take two days off. Give your liver two days in a row without alcohol every week to reduce the impact that alcohol can have on your liver and break the habit of drinking every day.

## Non Alcoholic Fatty Liver NAFLD

- Many of us are overweight and don't do enough exercise
- Fatty deposits can build up in your liver which can cause inflammation and scarring. This is more likely to happen if you are overweight, diabetic or regularly drink too much alcohol.

## How does NAFLD affect my liver?

- The first stage is fatty liver, or steatosis. This is where fat accumulates in the liver cells without any inflammation or scarring.
- For many people, the condition will not advance and a serious liver condition will not develop



## NAFLD can progress on to NASH.

- Non-alcoholic steatohepatitis (NASH) is a more significant condition, as it may cause scarring to the liver, and can progress to cirrhosis. Cirrhosis causes irreversible damage to the liver and is the most severe stage of NAFLD.
- NAFLD is recognised as one of the most common forms of liver disease worldwide and one that can progress to advanced liver damage.

## Four stages of NAFLD

1. Non-alcoholic fatty liver or steatosis
2. Non-alcoholic steatohepatitis (NASH)
3. NASH with fibrosis
4. Cirrhosis

## How to look after your liver



- Keep to a healthy weight
- If you're overweight, get help to lose weight safely – avoid crash diets and rapid weight loss
- Eating plenty of fruit and vegetables is important: aim for at least 5 portions a day
- Drink plenty of water

## Hepatitis

- Inflammation (swelling) of the liver caused by exposure to harmful substances such as alcohol or viruses

## Viral Hepatitis

- Viral hepatitis affects over 700,000 people in the UK
- There are several viruses that cause hepatitis. The common ones are hepatitis A, B and C. Most people recover from hepatitis A with no lasting liver damage, but hepatitis B and C can cause long term liver disease and even liver cancer.

## Hepatitis A

- Hepatitis A is passed out in the bowel motions of an infected person, and is passed from person to person by eating food or drinking water contaminated with the virus due to poor hygiene standards
- There are vaccines available to protect against hepatitis A.
- Vaccination is recommended if you are travelling abroad outside Europe and the US

## Hepatitis B

- **Hepatitis B** virus is found in blood and body fluids and causes liver damage. It is 50-100 times more infectious than HIV.
- Some people may only have a mild illness and feel they are not ill enough to see a doctor.
- A few people develop a serious illness and need to be looked after in hospital.
- More severe symptoms may include: diarrhoea, pale bowel motions, dark urine, jaundice

## Treatment of Hepatitis B

- People with the **acute phase** of hepatitis B, do not require treatment.
- For the majority of people, the symptoms resolve and the person can 'clear' the infection, usually within six months, meaning they are no longer infectious
- Their blood will always show the hepatitis B antibodies but they should never be infected again (they become 'immune').

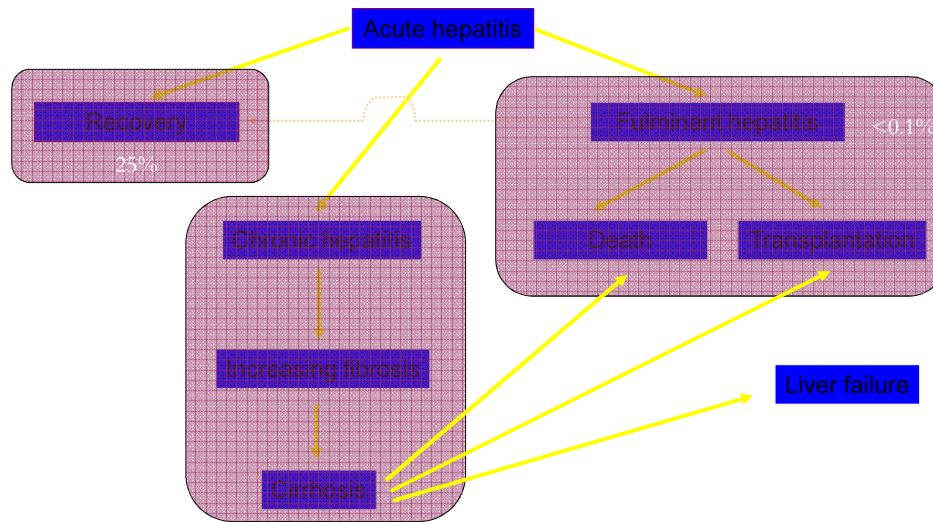
## Chronic Hepatitis B

- Long term infection is **chronic hepatitis B** which often requires treatment to stop or reduce the activity of the virus from damaging the liver, by limiting the replication of the virus.
- Not everyone will require treatment straight away. If you have low levels of the virus in your blood (a low viral load) and there is little sign of liver damage, it is likely that regular monitoring will be recommended and treatment started only if there are signs of disease

## Hepatitis C

- Hepatitis C, is a virus that is carried in the blood which infects and damages the liver.
- The hepatitis C virus infects the cells in your liver, causing inflammation (swelling and tenderness) and fibrosis.
- In people with chronic (long-term) hepatitis C infection, inflammation and fibrosis continues to spread and over time lead to cirrhosis
- Cirrhosis can take many years to develop and can do so without any noticeable symptoms until the damage to the liver is very serious.
- The build-up of scar tissue can interfere with the flow of blood to your liver and stop it from functioning properly.
- Cirrhosis can lead to liver failure.

## Time course of liver inflammation



## Cirrhosis

- Cirrhosis does not equal liver failure
- Many cirrhotic patients will be symptom free with good liver function

## Significant health problems

- In the UK, liver disease is on the increase.
- Three of the main causes of liver disease are:
- Obesity
- Undiagnosed Hepatitis infection
- Alcohol Misuse

## Preventable

- These causes of liver disease are all preventable so it's important to make sure:
- You're a healthy weight for your height; check your body mass index (BMI)
- Avoid drinking excessive amounts of alcohol
- Take the appropriate measures to prevent getting hepatitis, such as getting vaccinated against hepatitis A and B
- Know if you are at risk of getting or having hepatitis C

# Thank you



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