

Autoimmune hepatitis

PATIENT INFORMATION LEAFLET

**Department of Medicine, University of Thessaly
University Hospital of Larissa**

INTRODUCTION

The Department of Medicine, University of Thessaly at University Hospital of Larissa works to:

- support people with all kind of liver disease
- improve knowledge and understanding of the liver and related health issues
- encourage and fund research into new treatment
- lobby for better services

All our publications are reviewed by medical specialists and people living with liver disease. Our website provides information on all forms of adult liver disease. Calls us on 2413502436 or visit

<http://83.212.32.147/internalmedicine/index.php/el/>

THE LIVER

Your liver is your body's 'factory' carrying out hundreds of jobs that are vital to life. It is very tough and able to continue to function when most of it is damaged. It can also repair itself – even renewing large sections.

Your liver has around 500 different functions. Importantly it:

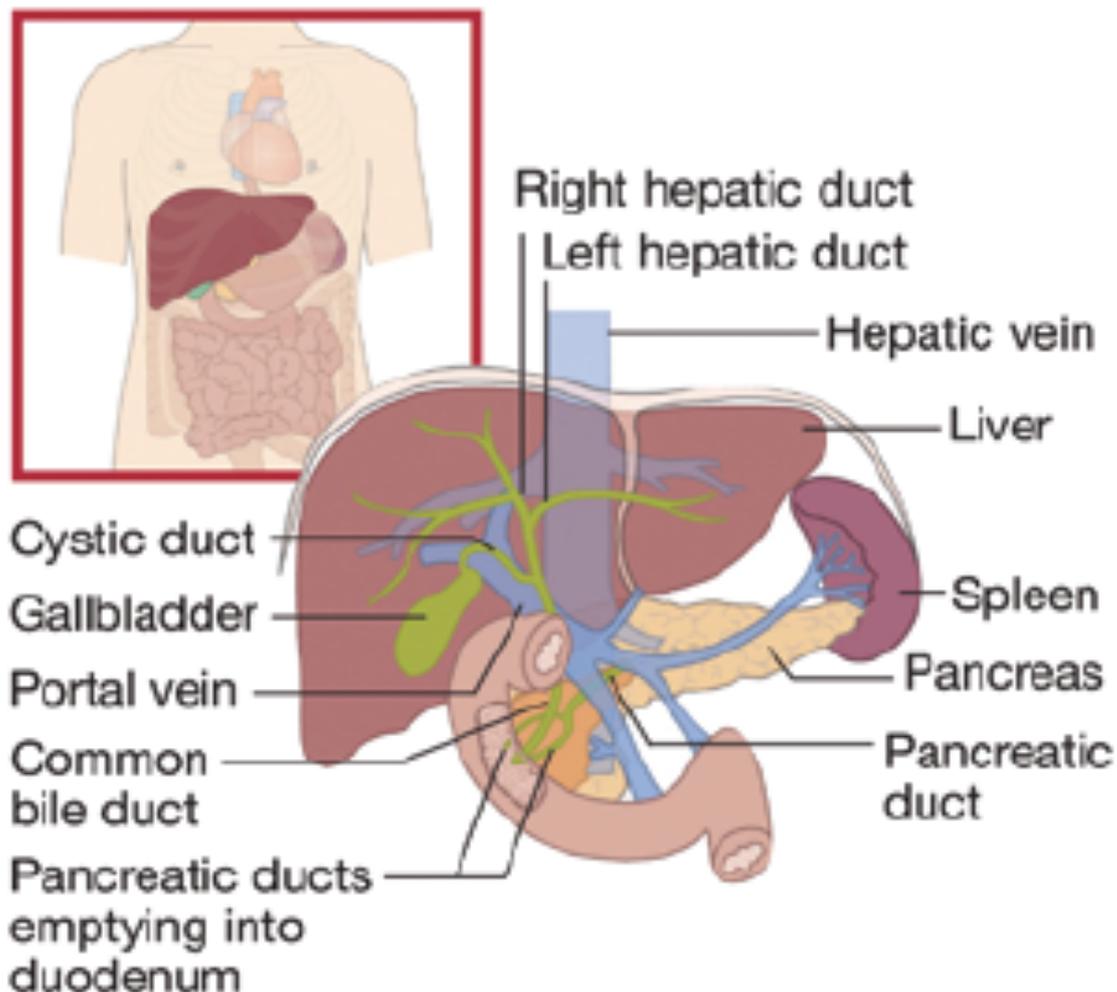
- fights infections and disease
- destroys and deals with poisons and drugs
- filters and cleans the blood
- controls the amount of cholesterol
- produces and maintains the balance of hormones
- produces chemicals – enzymes and other proteins – responsible for most of the chemical reactions in the body, for example, blood clotting and repairing tissue
- processes food once it has been digested
- produces bile to help break down food in the gut
- stores energy that can be used rapidly when the body needs it most
- stores sugars, vitamins and minerals, including iron
- repairs damage and renews itself.

HOW LIVER DISEASE DEVELOPS

Liver damage develops over time. Any inflammation of the liver is known as hepatitis, whether its cause is viral or not. A sudden inflammation of the liver is known as acute hepatitis. Where inflammation on the liver lasts longer than six months the condition is known as chronic hepatitis.

Fibrosis is where scar tissue is formed in the inflamed liver. Fibrosis can take a variable time to develop. Although scar tissue is present the liver keeps on

functioning quite well. Treating the cause of the inflammation may prevent the formation of further liver damage and may reserve some of the scarring.



Cirrhosis is where inflammation and fibrosis has spread throughout the liver and disrupts the shape and function of the liver. With cirrhosis, the scarring is more widespread and can show up on an ultrasound scan. Even at this stage, people can have no signs or symptoms of liver disease. Where the working capacity of liver cells has been badly impaired and they are unable to repair or renew the liver, permanent damage occurs.

This permanent cell damage can lead to liver failure or liver cancer. All the chemicals and waste products that the liver has to deal will build up in the body. The liver is now so damaged that the whole body becomes poisoned by

the waste products and this stage is known as end stage liver disease. In the final stages of liver disease, the building up of waste products affects many organs. This is known as multiple organ failure. Where many organs are affected, death is likely to follow.

WHAT IS AUTOIMMUNE HEPATITIS

Autoimmune hepatitis, often referred to as AIH, is one cause of chronic hepatitis and can be, if untreated, one of the most severe forms.

For a long time AIH was known as chronic active hepatitis. AIH is just one of the causes of chronic active hepatitis but it is now recognized as a specific disease.

What causes AIH is not well understood. It is believed that the cells that do the damage are circulating blood cells known as lymphocytes. They behave as though the hepatocytes (the liver cells) are foreign and start to destroy them. This lead to chronic hepatitis which, if untreated, will progress to cirrhosis and eventually to liver failure.

HOW COMMON IS AUTOIMMUNE HEPATITIS?

Fortunately, AIH is relatively uncommon although it occurs in both males and females.

The disease occurs more often in young adulthood (15-25 years) or late at more advance age (45-55 years).

WHAT ARE THE SIGNS AND SYMPTOMS OF AUTOIMMUNE HEPATITIS?

More often, the disease develops silently without symptoms and manifestations and is diagnosed by finding abnormal laboratory tests.

The most common signs of AIH are:

- fatigue
- a general feeling of ill-health
- lack of energy
- a tendency to tire easily
- an inability to finish a full day work
- the need to have more sleep
- joint pains (arthralgia) which are an indirect effect of chronic hepatitis and are usually mild and intermittent

Less common symptoms may be:

- nausea
- decrease appetite
- weight loss
- abdominal pain or bloating
- indigestion
- jaundice
- abnormal blood vessels on the skin on the face, arms and chest
- bruising

If the disease is very active or advanced, jaundice (yellowing of the skin and whites of the eyes and darkening of the urine) may occur.

If cirrhosis develops as a result of chronic AIH there may be muscle wasting, weight loss, ascites (swelling of the abdomen with fluid) and vomiting blood.

In many cases, the condition develops almost secretly, with no factor pointing to the liver as a cause of ill-health.

DIAGNOSIS

This is usually made by taking a careful medical history, performing a physical examination, arranging of blood tests and a liver biopsy.

People with AIH may have other autoimmune diseases at the time of diagnosis of AIH, before the diagnosis is made or after. Some of the conditions associated with autoimmune hepatitis include:

- thyroid disease (either over or under active)
- pernicious anemia (a deficiency of vitamin B12)
- vitiligo (pale patches on the skin)

TESTING FOR AIH

Liver function tests (LFTs) are blood tests that measure substances in the bloodstream that indicate that the liver is damaged.

Other blood tests used in AIH include those that identify immunoglobulins and autoantibodies. These are antibodies in the blood that react with the body's own cells and include antinuclear antibodies (ANA) or smooth muscle antibodies (SMA). To assess the amount of liver damage, confirm the diagnosis and to exclude other causes of liver disease, a liver biopsy is usually done. In this procedure a fine hollow needle is passed through the skin to the liver and a small sample of tissue is withdrawn.

This is usually done under local anaesthetic and may mean an overnight stay in hospital.

PREVENTION

The cause of AIH as yet remains unknown. You will not develop AIH by exposure to someone else with the disease. It is not thought to be due to a virus and has nothing to do with alcohol. Although there is a genetic link to AIH, at present there is nothing that can be done to prevent the condition occurring.

THERAPY

DRUGS

Once the diagnosis has been made, treatment is almost always required.

The treatment used is called immunosuppression. This therapy uses a type of steroids, known as corticosteroids, to reduce (suppress) the ability of your immune system to attack your liver cells.

It is usual to start treatment with a relatively high dose of steroids, usually prednisolone. When the inflammation is brought under control, the dose can be reduced. Usually other drugs are added (azathioprine or mycophenolate mofetil) are added to allow for a lower dose or even cessation of steroids.

Autoimmune hepatitis appears more often to be a controllable rather than a curable disease, therefore most patients need long-term maintenance therapy. It may be possible to completely withdraw the immunosuppression but this is not without risk as relapse can occur months, or even years after withdrawal.

In our Department, we usually use mycophenolate instead of azathioprine, as mycophenolate has fewer side effects and possibly a higher rate of remission

without steroids. Treatment duration is 3 to 5 years, when usually a liver biopsy is repeated and if there is a histological remission, treatment is discontinued.

You should not stop taking any of those drugs without first consulting your doctor or specialist.

SIDE EFFECTS OF TREATMENT

Unfortunately, corticosteroids have a number of side effects which your doctor should discuss with you. These are often seen when a high dose is given for a long time. They can:

- increase appetite
- cause weight gain
- induce diabetes or make diabetes worse
- cause fluid retention (which can lead to puffiness of the face and legs)
- cause indigestion
- thinning of the skin and bones. For most people who take steroids, additional treatment may be required to reduce the risk of bone loss
- a tendency to bruise more easily
- worsen hypertension
- to increase the severity of glaucoma (increased pressure in the eyes) or cataract

LIVER TRANSPLANTATION

For a few people who eventually develop advanced cirrhosis, a liver transplant may be necessary.

This is a major operation and you will need to plan it carefully with your medical team, family and friends.

LOOKING AFTER YOURSELF

DIET AND EXERCISE

People taking steroids should follow a more balanced diet, reducing carbohydrate-rich foods such as sugar, sweets, biscuits, fried foods, pasta, pies, potato chips and chocolate. Low fat foods are preferable as well as fruits and vegetables. In addition, salt-sodium intake should be restricted, avoiding excess salt in food and foods high in sodium, such as salty cheeses, sausages, canned and cooked foods, olives, pickles, prepared sauces, soups, salted pastries, salty snacks (potato chips, crackers, etc.), salted nuts and fast food. Consult food labels to avoid standardized products with increased amounts of sodium. If weight gain remains a problem, your doctor will recommend special dietary help from you.

Take care of adequate calcium intake by eating at least two portions of low-fat dairy a day (milk, yoghurt). Other good sources of calcium include green vegetables (spinach, lettuce, broccoli), unsalted nuts (almonds, walnuts, hazelnuts, sesame seeds) and small fish eaten with bones. For better absorption of calcium, adequate intake of vitamin D, which is intrinsically synthesized by exposure to the sun, is also required.

Daily walking is recommended to keep the muscles in good shape. However, you should definitely consult your doctor before starting any painful activity.

ALCOHOL

Anyone suffering from AH should not drink alcohol. Drinking alcohol can speed up and aggravate the condition of the liver.

EMPLOYMENT AND INSURANCE CONTRACTS

Another issue is that there is still ignorance in the community about the different forms of hepatitis. AIH is not an infectious disease and can have a very good prognosis if treated properly. However, AIH patients often report having problems when looking for a job or when they want to make an insurance policy. In these cases, patients should talk to their doctor so that the second one compiles a report describing your state of health and your life expectancy.

WHO ELSE CAN HELP?

PROMETHEUS – HELLENIC LIVER PATIENT ASSOCIATION

Tel.: 211 0122102

Address: L. Alexandras 213B, 11523 Ampelokipi, Athens

email: info@helpa-prometheus.gr

<http://www.helpa-prometheus.gr>

HPARXO – HELLENIC SOCIETY OF LIVER TRANSPLANTED PATIENTS

Tel.: 2103800550

Address: Veranzerou 15, 10677, Athens

email: info@shpel.gr

<http://www.shpel.gr>

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