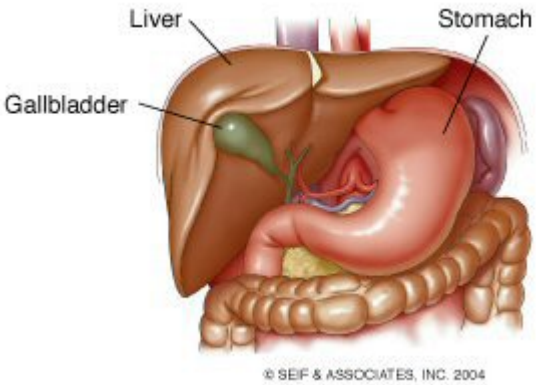
Autoimmune Hepatitis

Autoimmune hepatitis is a disease in which the body's immune system attacks liver cells. The immune system is the system in your body which fights off disease. When the body's immune system attacks the liver, the liver becomes inflamed and causes hepatitis. Researchers think a genetic factor (passed from parent to child) may make it more likely for some people to have autoimmune diseases. About 70 percent of those with autoimmune hepatitis are women. Most people with autoimmune hepatits are between the ages of 15 and 40, but the disease may happen at any age.



The disease is usually serious. If not treated, it will get worse over time, and it can last for years. It can lead to scarring and hardening of the liver (*cirrhosis*), and it can lead to liver failure. Autoimmune hepatitis is classified as either type 1 or 2. Type 1 is the most common form in North America. It occurs at any age and is more common among women. About half of those with type 1 have other autoimmune disorders, such as type 1 diabetes, proliferative glomerulonephritis, thyroiditis, Graves' disease, Sjögren's syndrome, autoimmune anemia, and ulcerative colitis. Your caregiver can tell you about these disorders and if they apply to you. Type 2 autoimmune hepatitis is less common. It usually affects girls ages 2 to 14, but adults can have it, too.

AUTOIMMUNE DISEASE

One job of the immune system is to protect the body from viruses, bacteria, and other living organisms. Usually, the immune system does not react against the body's own cells. Occasionally, the immune system mistakenly attacks the cells it is supposed to protect, and when this happens, the response is called autoimmunity. Researchers think that certain bacteria, viruses, toxins, and drugs trigger an autoimmune response in people who are genetically susceptible to developing an autoimmune disorder. This means it could be a tendency you inherited from your parents.

SYMPTOMS

- Fatigue is probably the most common symptom of this disease.

Other symptoms include:

- Enlarged liver.
- Jaundice.
- Itching.
- Skin rashes.
- Joint pain.
- Abdominal discomfort.
- Abnormal blood vessels (*spider angiomas*) on the skin.
- Nausea.
- Vomiting.
- Loss of appetite.
- Dark urine.
- Pale or gray colored stools.

People in advanced stages of the disease are more likely to have symptoms such as fluid in the abdomen (*ascites*) or mental confusion. Women may stop having menstrual periods.

Symptoms of autoimmune hepatitis range from mild to severe. Hepatitis caused by a virus or certain medications may have similar symptoms as autoimmune hepatitis, so tests may be needed for an exact

diagnosis. Your caregiver will also review all your medicines before diagnosing autoimmune hepatitis.

DIAGNOSIS

Your caregiver will make a diagnosis based on your symptoms, blood tests, and liver biopsy.

- **Blood tests**. A routine blood test for liver enzymes can help show a common pattern of hepatitis.
- **Liver biopsy**. A tiny sample of your liver tissue will be examined under a microscope. It can help your caregiver diagnose autoimmune hepatitis and tell how serious it is. You will go to a hospital or outpatient surgical facility for this procedure.

TREATMENT

Treatment works best when autoimmune hepatitis is discovered early. With proper treatment, this disease can usually be controlled. Recent studies show that continued response to treatment not only stops the disease from getting worse, but also may actually reverse some of the damage.

The primary treatment is medicine to slow down (*suppress*) an overactive immune system. Both types of autoimmune hepatitis are treated with daily doses of a corticosteroid. This is also called prednisone. Your caregiver may start you on a high dose (20 to 60 mg per day) and lower the dose to 5 to 15 mg/day as the disease is controlled. The goal is to find the lowest possible dose that will control your disease.

Another medicine, azathioprine, is also used to treat autoimmune hepatitis. Like prednisone, azathioprine suppresses the immune system, but in a different way. It helps lower the dose of prednisone needed, which reduces its side effects. Your caregiver may prescribe azathioprine, in addition to prednisone, once your disease is under control.

Most people will need to take prednisone, with or without azathioprine, for years. Some people take it for life. These medicines may slow down the disease, but everyone is different. In about 1 out of every 3 people, treatment can eventually be stopped. After stopping, it is important to carefully monitor your condition. Promptly report any new symptoms to your caregiver. The disease may return and be even more severe. This is especially true during the first few months after stopping treatment. In about 7 out of 10 people, the disease goes into an inactive state (*remission*) within 2 years of starting treatment. During that time the symptoms are less severe. Some persons with a remission will see the disease return within 3 years, so treatment may be necessary on and off for years, and possibly for life.

People with autoimmune hepatitis should also be vaccinated against hepatitis A virus and hepatitis B virus. Vaccination should be done as soon as possible after the diagnosis is made.

Side Effects

Both prednisone and azathioprine have side effects. Because high doses of prednisone are needed to control this disease, managing side effects is very important. Most side effects appear only after a long period of time.

Some possible side effects of prednisone are:

- Weight gain.
- Thinning of the bones (*osteoporosis*).
- Diabetes.
- Cataracts.
- Acne.
- Anxiety and confusion.
- Thinning of the hair and skin.
- High blood pressure.
- Glaucoma.
- Rounded face.

Azathioprine can lower your white blood cell count; these are the cells that fight infection. Sometimes it causes nausea and poor appetite. Rare side effects are:

- Allergic reaction.
- Liver damage.
- Inflammation of the pancreas gland with severe stomach pain (pancreatitis).
- More susceptible to infection.
- Diarrhea.

OTHER TREATMENTS

People who do not get better with standard immune therapy or who have severe side effects may be helped by other medicine. People who progress to end stage liver disease (liver failure) and/or cirrhosis may need a liver transplant. Transplantation has a 1-year survival rate of 90 percent and a 5-year survival rate of 70 to 80 percent.

HOPE THROUGH RESEARCH

Scientists are studying this disease to find out who gets it and why. They want to discover better ways to treat it. Basic research on the immune system will expand knowledge of autoimmune diseases in general. Continued research will help caregivers understand what triggers autoimmune hepatitis in some people. Research on different steroids, alternatives to steroids, and other immunosuppressants will eventually lead to more effective treatments.

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FOR MORE INFORMATION

Contact: American Liver Foundation (ALF)
www.liverfoundation.org

National Digestive Diseases Information Clearinghouse
www2.niddk.nih.gov

Information courtesy of the NIH

Document Released: 03/09/2005 Document Re-Released: 12/06/2010
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