



medfacts

AN EDUCATIONAL HEALTH SERIES FROM NATIONAL JEWISH HEALTH™

Systemic Lupus Erythematosus

Systemic lupus erythematosus, often just called lupus, is a chronic disease that can affect almost any part of the body. People with mild lupus may only have skin rashes and/or joint pain. In more severe lupus, important organs like the kidneys, heart, blood vessels, lungs, gastrointestinal tract, and brain can be involved. Any two people with lupus may have different symptoms. They may also have different lengths of time when the disease is active or in remission. While lupus cannot be cured, your health care provider can help you control symptoms and lead a relatively normal life.

What Happens in the Body?

Lupus symptoms are caused by an overly active immune system. Normally the immune system protects us by attacking bacteria, viruses and other cells recognized as foreign and harmful to the body. But in lupus, the immune system mistakenly attacks healthy cells and tissue. Lupus is called an **autoimmune disorder**. This is because the immune system attacks “self”. Auto means self. The reasons for these mistakes by the immune system are not completely understood. There are medicines that can help prevent the immune system from making mistakes. These medicines are very useful in treating lupus symptoms and preventing damage to the body.

When the immune system attacks self or foreign cells, inflammation occurs. Inflammation can get rid of foreign invaders, but damage results. When healthy tissues are mistakenly attacked in lupus, this can be seen as rash, joint pain or damage to organs. Because of this, lupus is also called an **inflammatory disorder**. The good news is that anti-inflammatory medicines can minimize the pain and damage of inflammation.

Why Does a Person Get Lupus?

The latest estimates are that 1.5 million people in the United States have lupus. Ninety percent of them are women. Most cases of lupus are diagnosed in women between the ages of 12 and 40. Non-Caucasians are 2-3 times more likely to have lupus than are Caucasians.

It is difficult to know exactly what has causes a person to develop lupus. Some people are born with a genetic predisposition to lupus. This means that their immune system may become confused more easily than normal. When a person with this predisposition is exposed to something in their environment lupus symptoms may result.

Environmental triggers are thought to include viral infections, exposure to silica dust, sun exposure, various medications, and hormones, especially estrogen. This may be why more women than men have lupus, and why lupus symptoms are often first noticed during pregnancy or when girls reach puberty. Researchers are working hard to determine the cause or causes of lupus.

How is lupus diagnosed?

Many people with lupus feel frustrated and angry because they have been ill for months or even years before they're told they have lupus. It is often difficult to diagnose lupus early in the disease. Lupus symptoms are similar to those of other diseases and can come and go even without treatment. In addition, all other possible causes for the person's symptoms must be investigated before treatment for lupus can begin.

In order to get a diagnosis of lupus, 4 or more of the following 11 signs and symptoms must occur:

- Rash over the cheeks (malar or butterfly rash)
- Round raised patches (discoid rash)
- Sensitivity to the sun or other ultraviolet light
- Ulcers or sores in the mouth
- Pain and swelling in joints that does not cause deformity.
- Inflammation around the lungs or heart
- Kidney problems
- Problems in the nervous system such as seizures
- Abnormalities in the blood like low blood counts.
- Abnormalities in the immune system that are determined by blood tests
- Antinuclear antibodies, (ANA) in the blood that can attack and damage healthy cells in the person with lupus.

The diagnosis of another type of lupus, Discoid lupus, can be made when a person only has a patchy, round, discoid rash, and no other symptoms. Blood tests and a skin biopsy are helpful in making this diagnosis. People with discoid lupus may or may not progress to systemic lupus erythematosus.

How Can Symptoms be Managed?

The goal of treatment is to relieve pain, control inflammation and prevent damage to vital organs. Medications are very helpful and are prescribed depending on the severity of symptoms and the organs that are involved. Lifestyle changes can also help decrease symptoms. These changes can include getting extra rest during a flare, reducing stress and avoiding sun exposure. Medicines and lifestyle changes can control the lupus symptoms in most people.

A Hopeful Future

Doctors and researchers at National Jewish and around the world are working hard to learn more about the causes, treatment and prevention of lupus. Lupus research is investigating genetics, immunology, environmental triggers and new medicines. Because of past research advances, most people with lupus are leading active lives with a normal lifespan. Current research will provide an even brighter future for people with lupus and other autoimmune diseases. For more information or to schedule an evaluation with one of our lupus specialists, call LUNG LINE® at 1-800-222-LUNG.

Other Resources:

Lupus Foundation of America, Inc.

2000 L Street, N.W., Suite 710

Washington, DC 20036

Phone: 202-349-1155

Website: <http://www.lupus.org/>

National Institutes of Health, NIAMS

1 AMS Circle

Bethesda, MD 20892-3675

Phone: 301-495-4484 or 877-22-NIAMS

Website: <http://www.niams.nih.gov/>

Arthritis Foundation

1330 West Peachtree Street

Atlanta, GA 30309

Phone: 800-283-7800

Website: <http://www.arthritis.org/>

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