CONDITION

Systemic lupus erythematosus

Systemic lupus erythematosus is a long-term autoimmune condition that can inflame several parts of the body.

WHAT IT IS
Long-term autoimmune condition causing inflammation throughout the body

BODY SYSTEM
Immune system, skin, joints, blood, kidneys, heart, lungs, brain

MAIN SYMPTOMS
Fatigue, joint pain, skin rashes, fever

WHAT CAUSES IT
Misguided immune response shaped by genes and triggers

HOW IT IS DIAGNOSED
Symptoms, examination, blood and urine tests; no single confirmatory test

MAIN TREATMENT
Antimalarial medicine, immune-suppressing treatment, and symptom relief

CAN IT BE CURED?
No, but treatment can control it

IS IT AN EMERGENCY?
Sometimes, with severe breathing trouble or stroke-like symptoms

LONG-TERM OUTLOOK
Often manageable, but organ involvement can be serious

Overview

Systemic lupus erythematosus, usually called SLE or lupus, is a long-term autoimmune condition. In autoimmune conditions, the immune system mistakenly attacks healthy tissue. This can cause inflammation in different parts of the body.

Lupus most often affects the skin, joints and blood cells. It can also affect the kidneys, lungs, heart, nervous system or blood vessels. The pattern is different from one person to another.

Symptoms may become more active during periods called flares. Between flares, they may improve or become quiet. Some people have mild symptoms, while others need ongoing treatment for organ inflammation.

There is no cure at present. However, treatment can reduce inflammation, prevent damage

and help many people continue with work, education, relationships and family life.

Symptoms

Fatigue is one of the most common symptoms. This can be more than ordinary tiredness and may not fully improve after sleep. Joint pain, stiffness and swelling are also common, particularly in the hands, wrists and knees.

Skin symptoms may include a rash over the cheeks and nose, often called a butterfly rash. Other rashes can appear after exposure to sunlight. Some people develop painless sores inside the mouth or nose, or have periods of increased hair loss.

Other possible symptoms include:

Kidney inflammation may not cause obvious symptoms at first. Protein or blood may be found during a urine test before you notice a change. This is one reason regular monitoring matters.

Lupus symptoms overlap with many other conditions. Having fatigue, joint pain or a facial rash does not by itself mean that you have lupus.

- Unexplained fever
- Swollen glands
- Fingers or toes changing colour in the cold
- Chest pain that worsens with deep breathing
- Headaches, difficulty concentrating or mood changes
- Swelling in the legs or around the eyes

Causes and risk factors

The exact cause of lupus is not known. It appears to develop through a combination of genetic susceptibility, immune system changes, hormones and environmental triggers.

Lupus can run in families, but it is not inherited in a simple or predictable way. Having a close relative with lupus or another autoimmune condition may increase risk, but most relatives do not develop it.

The condition is much more common in women, especially during the years when pregnancy is possible. People of any age, sex or ethnic background can develop lupus.

Possible triggers for symptoms or flares include sunlight, some infections, smoking, stress and changes in certain medicines. A small number of medicines can cause a separate condition

called drug-induced lupus. This often improves after the responsible medicine is stopped under medical supervision.

Triggers do not usually explain the whole condition. Developing lupus is not your fault, and it is not caused by something you ate or by normal levels of everyday stress.

Diagnosis

There is no single test that proves or rules out lupus. Diagnosis is based on your symptoms, examination findings and a combination of laboratory tests. It may take time because symptoms can appear gradually and resemble other conditions.

An antinuclear antibody, or ANA, blood test is usually part of the assessment. Most people with lupus have a positive ANA result, but many people without lupus also test positive. A positive result alone is not a diagnosis.

More specific blood tests may look for antibodies such as anti-double-stranded DNA and anti-Smith antibodies. Complement proteins, which form part of the immune system, may be measured because their levels can change when lupus is active.

Other testing commonly includes:

Imaging or heart and lung tests may be needed for certain symptoms. If tests suggest kidney inflammation, a kidney biopsy may be recommended. This involves taking a small tissue sample so the type and severity of inflammation can be identified.

Specialists use classification criteria to support consistent assessment and research. These criteria can guide thinking, but they do not replace an individual medical evaluation.

- Blood counts to check red cells, white cells and platelets
- Kidney and liver function tests
- Urine tests for blood, protein and signs of inflammation
- Measurement of urine protein when kidney involvement is suspected
- Tests for inflammation and blood-clotting antibodies

Treatment and management

Treatment is matched to the organs involved and how active the inflammation is. The aim is to control symptoms, prevent flares, limit organ damage and reduce treatment side effects.

Hydroxychloroquine, originally developed as an antimalarial medicine, is commonly used for

lupus. It can help control skin and joint symptoms and reduce flares. People taking it need eye checks because long-term use can rarely damage the retina, the light-sensitive tissue at the back of the eye.

Pain-relieving or anti-inflammatory medicines may help some muscle and joint symptoms. These are not suitable for everyone, especially when kidney, stomach, heart or blood-clotting problems are present.

Corticosteroids like prednisone or hydrocortisone can control inflammation quickly. They may be given as tablets, injections or treatment into a vein. Because long-term or high-dose steroid use can cause significant side effects, the goal is generally to use the lowest effective exposure while other treatment takes effect.

Medicines that reduce immune activity may be needed for persistent symptoms or organ inflammation. Examples include methotrexate, azathioprine, mycophenolate and cyclophosphamide. Biologic medicines, such as belimumab or anifrolumab, target particular parts of the immune response. The choice depends on the symptoms, organs affected, previous treatments and plans for pregnancy.

Do not stop lupus medicines suddenly without medical advice. A sudden change can lead to a flare, and corticosteroids may need to be reduced gradually.

Regular care may include blood pressure checks, blood and urine tests, eye screening, vaccination review and assessment of bone and heart health. Pregnancy planning is also important because some lupus medicines are not safe during pregnancy.

Complications

Ongoing inflammation can damage organs, although early recognition and treatment reduce this risk.

Lupus nephritis is inflammation of the kidneys. Without effective control, it can cause lasting kidney damage and, in severe cases, kidney failure. It may be present even when you feel well, so routine urine and blood tests are important.

Inflammation can affect the lining around the lungs or heart, causing pain with breathing. Less commonly, lupus can inflame the heart muscle, lungs or brain.

Lupus and some treatments can raise the risk of infections. The condition is also linked with earlier cardiovascular problems, including heart attack and stroke. High blood pressure, smoking and high cholesterol add to this risk.

Some people have antiphospholipid antibodies, which can increase the chance of blood clots

and certain pregnancy complications. Having these antibodies does not mean that a clot will definitely occur.

Long-term corticosteroid treatment can contribute to osteoporosis, cataracts, diabetes and infection risk. Monitoring helps identify these problems early.

Prevention

Lupus cannot currently be prevented. It develops from factors that are not fully understood and are not under your control.

Once lupus is present, some steps may reduce flares or complications. Protecting your skin from ultraviolet light can help if sunlight triggers symptoms. This may include shade, protective clothing and broad-spectrum sunscreen.

Not smoking supports heart, lung and blood-vessel health. Regular movement, enough rest and a balanced diet can support general health, although no specific diet cures lupus.

Take medicines as agreed and attend scheduled blood, urine and eye tests. Speak with your care team before using supplements or making major dietary changes, because some products may interact with treatment.

Living with it and what to expect

Lupus usually lasts for life. Its activity can change over months and years, with flares followed by quieter periods. A flare may involve familiar symptoms, new symptoms or changes in blood and urine results.

It can help to track symptoms such as rashes, joint swelling, fevers and unusual fatigue. This may reveal patterns, but day-to-day symptom checking should not replace scheduled monitoring. Kidney or blood changes may occur without obvious warning signs.

Many people can work, study, exercise and have children. Adjustments may be needed during active symptoms, such as flexible hours, rest breaks or temporary changes in physical activity. Fatigue may remain troublesome even when inflammation is controlled, so sleep problems, pain, low mood, anaemia and other possible causes may need attention.

Pregnancy is possible for many people with lupus. Outcomes are generally better when the condition is well controlled before conception and pregnancy is planned with the relevant specialists. Medicines should be reviewed in advance rather than stopped without guidance.

Your treatment may change as symptoms settle, flare or affect different organs. Regular

follow-up continues even during quiet periods because the aim is to detect changes before lasting damage develops.

When to get medical help

Arrange a routine appointment if symptoms are gradually worsening, a rash keeps returning, joint swelling persists or fatigue is interfering with daily life. If you already have lupus, report possible flare symptoms rather than waiting for the next routine review.

Seek prompt, same-day medical advice for:

Call emergency services for severe breathing difficulty, crushing or persistent chest pain, coughing up blood, fainting, a seizure, sudden confusion, or stroke-like symptoms such as facial drooping, arm weakness or difficulty speaking.

Routine monitoring remains important when you feel well. Emergency care is for sudden or severe symptoms, not for every change in fatigue or joint discomfort.

- New swelling around the eyes, legs or feet
- Blood in the urine or a major reduction in urine
- Persistent fever, especially during immune-suppressing treatment
- A new painful or swollen leg
- New chest pain or shortness of breath
- Pregnancy or plans to become pregnant while taking lupus medicines

Common questions

Is lupus contagious?

No. You cannot catch lupus from another person, and it cannot be passed through touch, sex, coughing or shared food.

Is lupus cancer?

No. Lupus is an autoimmune condition, not a cancer. Some symptoms and treatments may overlap with those seen in cancer care, but the underlying processes are different.

Can lupus go away completely?

Symptoms can become quiet for long periods, sometimes called remission. This does not mean the condition has been permanently cured. Monitoring and, for many people, ongoing

treatment remain necessary.

What does a lupus flare feel like?

A flare may cause increased fatigue, joint pain, swelling, fever, mouth sores or a returning rash. Organ inflammation can sometimes produce few symptoms, so blood and urine tests also help identify active lupus.

Can I have a normal pregnancy with lupus?

Many people with lupus have successful pregnancies. Risks are higher when lupus is active or when the kidneys, blood pressure or antiphospholipid antibodies are involved. Planning before conception allows treatment to be adjusted safely.

Does lupus shorten life expectancy?

Lupus can be serious, particularly when it affects major organs or causes blood clots or severe infection. Modern monitoring and treatment have improved long-term outcomes. Your outlook is shaped by organ involvement, disease control and other health risks.

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