

Lupus affects different people in different ways. Some people with lupus have problems with their nervous system.

## **How Does Lupus Affect the Nervous System?**

The nervous system has 3 parts:

- **Central nervous system** the brain and spinal cord
- **Peripheral nervous system** the nerves that make your muscles move and tell your brain what your body is feeling
- **Autonomic nervous system** the system that controls internal processes like your breath, heartbeat, and blood flow

Lupus can cause problems in any part of the nervous system.

#### Lupus and the central nervous system

Lupus in the central nervous system (CNS) is sometimes called CNS lupus. Symptoms include:

- Confusion and trouble concentrating (sometimes called lupus fog)
- **Seizures** (sudden, unusual movements or behavior)
- **Psychosis** (losing touch with reality)
- Stroke (blocked blood flow in the brain that causes brain cells to die)
- · Vision problems

CNS lupus can also cause some rare but serious problems, including:

- CNS vasculitis (inflammation of the blood vessels in the brain)
- **Myelitis** (inflammation of the spinal cord)

Some medicines and other health conditions can cause symptoms similar to CNS lupus. Your doctor can do tests to find out what's causing your symptoms.

## What's lupus fog?

Many people with lupus sometimes have confusion, memory loss, and trouble expressing thoughts. These symptoms can come and go. Lupus fog can be frustrating, but you can learn to live with your symptoms and improve your quality of life. Talk with your doctor about ways to cope with lupus fog.



# | Find Out If Lupus Is Affecting Your Nervous System

Nervous system problems might be symptoms of lupus, or they might be caused by a different condition. A special doctor called a neurologist can find out if your nervous system problems are related to lupus.

#### You may need to have tests, including:

- · Lab tests, like blood tests
- Brain scans, like a CT or MRI of your head
- Electroencephalogram (EEG) to check the electrical activity in your brain
- Spinal tap to check the fluid in your spine

#### Find the right treatment plan

If lupus is causing problems with your nervous system, there are many different medicines that can treat them. Your doctors can help you find a treatment plan that works for you.

Keep in mind that any medicine you take for lupus can have side effects. Talk with your doctors about what changes to watch for with the medicines you're taking. And tell your treatment team right away if you have any side effects.

#### **Get help right away**

Some nervous system problems, like strokes, are medical emergencies. Get help right away if you have any of these symptoms — especially if they come on quickly and you've never had them before:

- · High fever
- Psvchosis
- Seizures
- Sudden numbness, weakness, or paralysis in the face, arm, or leg usually on one side
- Sudden severe headache
- Sudden severe stiff neck
- Sudden trouble seeing, speaking, or walking

#### What's inflammation?

Inflammation usually happens when your immune system is fighting an infection or an injury. But lupus makes your immune system attack healthy tissue instead, and that can cause inflammation in lots of different body parts. Symptoms of inflammation in the nervous system can include psychosis and confusion.

#### Lupus and the peripheral nervous system

Lupus can damage nerves in the body by causing inflammation of the nerves or the tissue around the nerves. This nerve damage is sometimes called **peripheral neuropathy**. The main symptoms are numbness, tingling, and being unable to move a part of your body.

Other symptoms include:

- Vision problems
- Face pain
- Ringing in the ears or change in hearing
- Dizziness
- Drooping face and eyelids
- Carpal tunnel syndrome, which causes pain, tingling, and numbness in the hand

#### Lupus and the autonomic nervous system

Lupus in the autonomic nervous system can cause a wide range of symptoms, including:

- Changes in heart rate or blood pressure
- Feelings of numbness, tingling, or burning that can happen in many parts of the body
- Raynaud's phenomenon (fingers and toes turning white or blue and feeling numb when a person is cold or stressed)
- Livedo reticularis (a blue or purple pattern showing through the skin that looks like lace or fishnet stockings)
- Palmar erythema (palms of the hands turning red)
- Stomach problems, like vomiting (throwing up) or diarrhea (watery poop)

### Other nervous system problems

Many people with lupus have other nervous system problems, like headaches, depression, and anxiety. But doctors aren't sure if these problems are caused by lupus. If you have any of these problems, talk with your doctor about possible causes and how to treat them.

NATIONAL

# Resource Center on Lupus •

by Lupus Foundation of America

For more information about lupus, please visit the **National Resource Center on Lupus** at:

**Lupus.org/Resources**