

# SLE (Lupus) affecting the kidneys

Systemic lupus erythematosus, often shortened to **Lupus** or **SLE**, is one of the 'autoimmune' diseases that can affect a wide variety of organs.

## What is systemic lupus erythematosus?

It is most commonly diagnosed in young women, but also occurs in men, and at any age. It often runs for years, in an up and down course with periods when the disease is quiet. In some people SLE can be short lived and mild, whilst in others it can be a prolonged and sometimes serious disease. This information is mostly about renal lupus - that is, lupus affecting the kidneys. If you haven't already read much about lupus, you should read our [information on SLE](#), which has come from Arthritis Care (contact details at the end of this information), or the information from Lupus UK, again listed under [further information](#).

## Renal lupus

Lupus affecting the kidney is sometimes said to be the most severe lupus. In fact many people with 'ordinary' lupus have mild kidney involvement. Unfortunately it is true that serious kidney disease usually requires the most powerful anti-lupus treatment. However it is important to remember that lupus can almost always be successfully treated.

## What is autoimmune disease?

An autoimmune disease is one that is caused by the body's own defensive immune system. This system usually fights off infection and inflammation from outside the body, but there are some diseases in which it appears to attack the body itself, and SLE is one of these. Antibodies, which the body usually produces to protect itself, become harmful in autoimmune diseases, and in SLE the body seems to produce antibodies against its own DNA, and other targets.

## What causes SLE?

In most cases we do not know why SLE develops. A small number of cases follow the use of certain drugs. Rarely lupus seems to run in families. There are certain factors which might worsen someone's SLE, including sunlight exposure, operations, and sometimes pregnancy. Stress is sometimes said to do this too but this is difficult to prove. The disease is not infectious or contagious.

## What are the symptoms of SLE?

SLE may do so many different things that it is difficult to list these. Here are the most common symptoms:

General health	Fatigue Weight loss
Skin	Rash often on the face Sensitivity to light Hair loss Raynaud's syndrome - cold fingers
Joints	Arthritis
Chest	Pleurisy
Blood	Anaemia Low platelet count Tendency to blood clots

## What are the signs that SLE is causing kidney disease?

As in most kidney diseases, symptoms are rare in the early part of SLE affecting the kidney. There may be abnormalities on testing the urine protein and blood may be found (proteinuria and haematuria). In some cases the protein leak may be large enough to cause [nephrotic syndrome](#). When there is more inflammation in the kidney, blood may also appear in the urine usually in small quantities that are only picked up by testing. In more severe disease, blood pressure rises, blood tests of kidney function become abnormal, and eventually the amount of urine produced may fall and the kidneys fail completely.

## What sorts of kidney disease can SLE cause?

SLE can cause a wide range of kidney diseases. People can develop one of these, several together, or they can progress from one to another. So [nephrotic syndrome](#) may be caused by SLE, but so may a severe [crescentic nephritis](#) that requires urgent treatment to save kidney function.

## How can you tell what type of kidney disease SLE causes?

To find out exactly how SLE is affecting the kidney, most people need a [kidney biopsy](#). This test involves the insertion of a needle into the kidney by going

through the back. A tiny sample of kidney is removed and examined under a microscope and by other special tests.

### **Can I do without a biopsy?**

Mild cases of lupus nephritis can often simply be observed without any specific treatment; in such cases a biopsy is unnecessary. More complicated cases, particularly where treatment is needed, usually require a biopsy to make the diagnosis, and may require further biopsies to determine how the disease is progressing.

### **What treatment is available for kidney disease in SLE?**

Just as SLE and the kidney diseases it causes are very variable, so the therapies that can be used to treat it are very variable. As SLE results from some abnormal activity of the body's immune system, it seems logical to use therapy that targets this system; this is called [immunosuppressive therapy](#). Doctors will also pay attention to other issues as well as specific therapy. Amongst these, it will be important to ensure that blood pressure is well controlled; infection, diet and smoking will also be addressed.

### **What is immunosuppressive therapy?**

Separate information on this topic is available. The commonest [immunosuppressive agents](#) used in the treatment of SLE affecting the kidneys are **steroids** such as prednisolone tablets and methylprednisolone injections, **cyclophosphamide**, which comes as tablets and drips, and **azathioprine**. Most treatment can be done as an outpatient. Some therapy needs to be given in hospital, but visits are usually short. Some people can be sufficiently unwell with their SLE that they require admission to hospital. Other forms of treatment are available for SLE that affects other organ systems.

### **What happens if therapy is not successful?**

In many cases when SLE affects the kidneys, treatment does not cure the condition, it just keeps it under control. If treatment is stopped, the disease may get worse again. In other cases, treatment is unable to undo the damage done, and the kidneys deteriorate. If this happens, kidney failure may occur (see information on [chronic renal failure and its progression](#)). If it does, good health can be maintained by dialysis or by kidney transplantation.

## Where can I find further information?

Lupus is quite a common illness, and it has affected a lot of young people. The problem is therefore sometimes that there is too much information available. There are many internet sites, some of which are about research and are very complicated. The following selected sites look useful though:

[Lupus UK](#) is excellent, with lots of information - it doesn't seem to be the official Lupus UK site but is run by one of their members

At lupus.com, the [list of contacts](#) to other SLE-related sites is good. Many of these are by patients themselves and can be interesting

[Arthritis Care](#) has little information on lupus on its website (yet), but provides excellent written information. Contact them at Arthritis Care, 18 Stephenson Way, London NW1 2HD. Tel: 020 7380 6500. Fax: 020 7916 1505

[The Hamline University site](#) (at St. Paul's, Minnesota, USA) is rather a mixed bag of information, but has good links to other sites, and some good information under **Articles**.

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