

# Malignant hypertension

Malignant hypertension is a serious condition caused by very high blood pressure. It can quickly cause serious damage to eyes, kidneys and brain. Some of the changes can be reversed by treatment but some permanent damage may occur.

Malignant means bad or evil. Sometimes a tumour is called malignant when it is a cancer, but malignant hypertension is not cancer. It is sometimes called **accelerated phase hypertension**. Malignant hypertension is also known as a hypertensive emergency or cr

## **What's the difference between hypertension (high blood pressure) and malignant hypertension?**

Malignant hypertension is uncommon and much more severe than 'ordinary' high blood pressure. Although all high blood pressure can damage arteries, that damage usually occurs slowly over many years. In malignant hypertension, severe damage occurs over weeks or less.

It may not just be how high the blood pressure is, but also how quickly it has risen, that makes malignant hypertension different. There may be other differences too.

## **What causes malignant hypertension?**

Most things that cause high blood pressure can occasionally cause malignant hypertension. However some things are more likely to. Kidney disease is certainly one of these. Some other diseases can - systemic sclerosis (scleroderma), SLE are examples. In some people, no cause can be found. [More information about scleroderma.](#)

## **What does it do?**

Headache is uncommon with hypertension unless blood pressure is very high. It is very high in malignant hypertension, so headaches are frequent. Brain involvement sometimes causes fits (convulsions). Eyesight may be blurred or there may be black spots in your vision. Kidney damage can occur rapidly and it may cause complete renal failure.

Malignant hypertension causes severe damage to tiny arteries called arterioles. These take blood that last little bit of the journey to wherever it is going – so they are vital. Arterioles anywhere in the body can be affected, but it is the eyes, the brain and the kidneys that are most commonly worst affected.

The eyes are useful for diagnosis, as damaged arterioles can be seen at the back of the eye, and the optic disk, where the optic nerve goes to the retina, is often very swollen – this is called papilloedema.

### **What's the treatment?**

The treatment is to lower the blood pressure using medicines. Although it is urgent, it may be dangerous to reduce it to normal levels too quickly. Often tablets alone are enough, but sometimes injections or intravenous infusions are needed. Often more than one kind of medicine is required – sometimes several. Treatment for malignant hypertension usually has to be started in hospital, and will in some cases require close monitoring of blood pressure in a high dependency unit to avoid complications of the treatment.

### **What will happen?**

In the past malignant hypertension was almost always fatal. Now that treatments are available, it can usually be successfully treated.

Kidney function often gets worse when treatment is started, followed usually by some improvement, although this cannot be guaranteed if the damage is severe. Occasionally improvement occurs weeks to months later, even after dialysis has been necessary. About 1 in 5 persons with malignant hypertension may ultimately require dialysis long-term.

In some people there may be some permanent damage to the brain or eyes.

### **Further information**

- More information on [high blood pressure and the kidney](#) from EdREN. Describes how kidney disease often goes with high blood pressure, and why patients with kidney disease should be treated to lower blood pressures than other people.
- [Information on chronic renal failure](#), for those left with some kidney damage.

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