

---

# Giant Cell Arteritis Factsheet

**Author**  
Dr Laurence Knott

**Peer Reviewer**  
Dr Neil Basu & Dr David Kluth

Giant cell arteritis (GCA) is a form of vasculitis that predominantly affects large arteries. The arteries of the head and neck are particularly involved. Abnormally large cells develop in these arteries ('giant cells'). The arteries running along the temples (the areas on each side of the forehead) are frequently involved, in which case the condition has previously been called temporal arteritis.

## Who gets GCA?

GCA affects about 20-30 in 100,000 people. It is twice as common in women as men and mainly affects people over the age of 60.

## What causes GCA?

The cause of GCA has not been fully worked out but is thought to be a result of the person's immune system attacking the cells lining the arteries. This seems to be associated with the ageing process.

## What are the symptoms of GCA?

The symptoms will depend on which artery or arteries are affected. Two out of three people get headaches. You may notice this coming on suddenly and lasting about a day but it may develop gradually over several days or weeks. Usually it is on the front and side of the head. It may be one-sided or affect both sides. You may feel tenderness the arteries on one or both temples and be able to see the swollen arteries in a mirror. You may also get pain in the jaw muscles (jaw claudication) whilst eating or talking. This eases off when these muscles are rested. One in five people get problems with their eyesight. This can be an early warning sign. Some people report a feeling of a shade covering the eye, which gets worse until vision is lost completely. There is no pain in the eye. If treatment is not started the other eye can become affected, usually within a week or two but sometimes within 24 hours. Double vision is another symptom that sometimes occurs. It is therefore very important that you consult a doctor quickly if you get either of these types of visual problems.

Other symptoms you may notice include tiredness, depression, fever and night sweats. You may go off your food and lose a bit of weight. You may get these symptoms for weeks or months before the headaches or eyesight problems start.

About half the people who get GCA also get another condition called polymyalgia rheumatica. This causes stiffness in the muscles. For more details, see our separate leaflet, Polymyalgia Rheumatica.

## How is GCA diagnosed?

The diagnosis may be suspected by a doctor on the basis of symptoms and a blood test for inflammation, either erythrocyte sedimentation rate (ESR) or C-reactive protein (CRP). If this is raised it is often necessary to confirm the diagnosis by taking a piece of material from the temporal artery (biopsy) and looking at it under a microscope. Recently, the diagnosis has been made using a scan. This can avoid the need for doing a biopsy.

---

### What is the treatment for GCA?

A steroid medicine such as prednisolone is given to reduce the inflammation. You will usually be started on a high dose such as 60mg a day. The symptoms usually begin to get better in a few days. The dose is gradually reduced over time. The amount of time it takes to get down to this dose can vary from person to person, depending on symptoms. Your doctor may also advise a daily dose of aspirin (usually 75mg) to prevent complications from circulatory problems (see below). Both steroids and aspirin can lead to the development of stomach ulcers so you may also need to take a medicine to protect the stomach lining called a proton pump inhibitor (PPI). It may also help to take treatment to prevent osteoporosis, which can be another complication of long-term steroids.

### Does GCA get better?

You may be able to come off steroids altogether after one to two years. Some people take longer and can even be on steroids for life. Eye problems are less likely to occur if steroids are started early. Without treatment, one in five people get partial or total loss of vision. Even if treatment is started, one in twenty people still get visual loss. If sight is lost in one eye, treatment is still given to protect the other eye. Occasionally, complications can arise when other arteries are affected, causing obstruction to the circulation. This can include heart attacks, strokes, and aortic aneurysm (a ballooning of the largest artery of the body, the aorta).

### Further reading

Weyand CM, Liao YJ, Goronzy JJ.

The immunopathology of giant cell arteritis: diagnostic and therapeutic implications.

<http://www.ncbi.nlm.nih.gov/pubmed/22914691>

Seetheraman M et al, Giant Cell Arteritis, Medscape, 2012.

<http://emedicine.medscape.com/article/332483-overview>

Meisner RJ, Labropoulos N, Gasparis AP, Tassiopoulos AK. How do diagnose giant cell arteritis Int Angiol. 2011 Feb;30(1):58-63. Review

<http://www.ncbi.nlm.nih.gov/pubmed/21248674>