



## Giant Cell Arteritis

When an older person complains of a new, persisting headache, especially if accompanied by flu-like symptoms or weight loss, it can be due to a condition called giant cell arteritis (GCA). This disease of blood vessels can occur together with [polymyalgia rheumatica](#) (PMR).

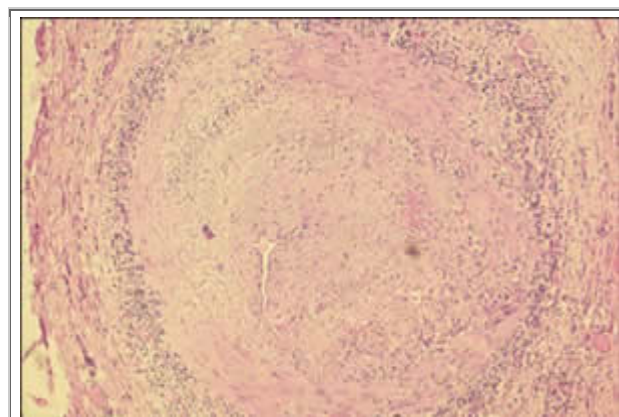
### Fast facts

- GCA affects older adults, usually those over the age of 60.
- If GCA impairs blood flow to the eye, loss of vision can occur.
- To prevent complications, GCA should be diagnosed and treated as soon as possible.

### What is giant cell arteritis?

GCA is a type of [vasculitis](#) or arteritis, a group of diseases whose typical feature is inflammation of blood vessels. In the case of GCA, the vessels most commonly involved are the arteries of the scalp and head, especially the arteries over the temples, which is why another term for GCA is “temporal arteritis.”

GCA can overlap with PMR. At some point, 5-15% of patients with PMR will be diagnosed with GCA. Looked at another way, about 50% of patients with GCA have symptoms of PMR. The symptoms of the two conditions can occur at the same time or separately.



A biopsy shows diffuse inflammation of the temporal artery.

The most common symptom of GCA is a new headache, usually in the area of the temples, although headache due to GCA can occur anywhere, including the front, top and back of the skull. Almost as common are more generalized symptoms, such as unusual fatigue, loss of appetite, weight loss, a flu-like feeling or fevers. Occasionally the only



indication of GCA is a recurring, prolonged fever. Less common symptoms involve pain in the jaw when chewing or facial, tongue or throat pain.

If GCA spreads to the blood supply of the eye, vision can be affected. Visual symptoms include temporary blurring, double vision or actual blindness. Loss of vision in GCA can occur suddenly and usually cannot be reversed. What is important, however, is that this complication can be prevented with appropriate treatment. In fact, if vision is intact at the time treatment for GCA is started, the risk of visual loss is 1 in 100 or less. It is essential that patients who have PMR, either active or inactive, immediately report any symptoms of new headache, visual symptoms or jaw pain to their physicians.

### What causes giant cell arteritis?

Like PMR, the cause of GCA is unknown.

### Who gets giant cell arteritis?

GCA affects the same patients as PMR: only older adults over the age of 50, females more than males, and whites more than nonwhites.



This picture shows the swelling and thickening of the small artery under the skin. This artery is referred to as the temporal artery.

### How is giant cell arteritis diagnosed?

Unfortunately, there is no blood test or noninvasive way to confirm the diagnosis of GCA. The erythrocyte sedimentation rate, or “sed rate,” a blood test that provides an indirect measure of inflammation, is usually significantly elevated in people with GCA. Because other diseases can cause high sedimentation rates, however, this finding cannot be relied on for proof of the diagnosis of GCA. Accordingly, it is common to recommend a biopsy of a small piece of the temporal artery, which is then examined under the microscope for evidence of inflammation. The temporal artery biopsy is an outpatient procedure, done under local anesthesia, and leaves only a small scar that cannot be seen at the hairline in front of the ear. If there is doubt about the diagnosis based on the first

biopsy, biopsy of the temporal artery on the other side of the head may be recommended.

### How is giant cell arteritis treated?

The treatment for GCA should begin as soon as possible because of the risk of loss of vision. If the diagnosis is strongly suspected, treatment can be started before the diagnosis has been established by temporal artery biopsy. Unlike the treatment for PMR, which requires only low-dose corticosteroids, high doses of corticosteroids usually are given for the treatment of GCA, typically 40 to 60 mg of prednisone (*Deltasone*, *Orasone*, etc.) per day. Headaches and other symptoms subside quickly, and the sedimentation rate declines to a normal range. The high dose of corticosteroids is kept up usually for 1 month and then slowly decreased. The speed at which the dose is lowered may have to be adjusted if there are recurring symptoms of GCA or significant increases in the sedimentation rate but, in most cases, the prednisone dose can be reduced to about 5 to 10 mg per day over several months, and often discontinued entirely after 1-2 years. Subsequent recurrences of GCA are rare.



### Living with giant cell arteritis

As would be expected, side-effects are more common with higher doses of corticosteroids and must be monitored attentively by the physician. Baseline bone density testing should be done because corticosteroid treatment can cause bone loss. To protect against osteoporosis and the risk of fractures, supplements of calcium and vitamin D are recommended, often along with prescription medications, such as one of the bisphosphonates: risedronate (*Actonel*), alendronate (*Fosamax*), ibandronate (*Boniva*), or zoledronic acid (Reclast). Some of the side effects from high-dose corticosteroids—for example, jitteriness, sleeplessness and weight gain—can be unpleasant, but are reversible, and subside as the dose is reduced. Muscle weakness, cataracts and skin bruising also can occur with corticosteroid use.

### Points to remember

- GCA, a disease of blood vessels, may occur together with [polymyalgia rheumatica](#).
- New headache is a common symptom of GCA.
- Permanent loss of vision is a potentially serious complication of untreated GCA.
- High doses of corticosteroids are used for the treatment of GCA.

### The rheumatologist's role in the treatment of giant cell arteritis

Giant cell arteritis can be difficult to diagnose and requires prompt treatment to preserve vision. Rheumatologists are specialists in inflammatory diseases of blood vessels, and thus are experienced in the diagnosis and management of these unusual disorders.

### To find a rheumatologist

For a listing of rheumatologists in your area, [click here](#).

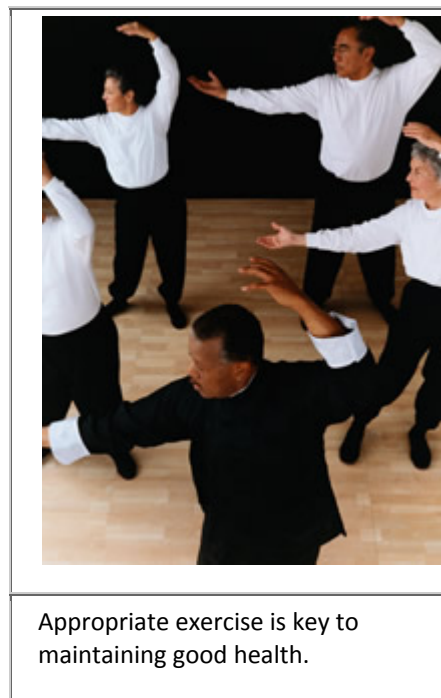
Learn more about [rheumatologists](#) and [rheumatology health professionals](#).

### For more information

The American College of Rheumatology has compiled this list to give you a starting point for your own additional research. The ACR does not endorse or maintain these Web sites, and is not responsible for any information or claims provided on them. It is always best to talk with your rheumatologist for more information and before making any decisions about your care.

National Institute of Arthritis and Musculoskeletal and Skin Disease  
<http://www.niams.nih.gov/>

National Library of Medicine  
<http://www.nih.gov/medlineplus>





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Written by William Docken, MD, and reviewed by the American College of Rheumatology Patient Education Task Force.

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