What is giant cell arteritis?
Giant cell arteritis (GCA) is an inflammation (swelling) of the arteries, which are the blood vessels that carry blood away from the heart. When arteries swell, it reduces the blood flow through these vessels. GCA affects the arteries in the neck, upper body and arms. It is also called cranial or temporal arteritis because it affects the head (cranium).

Because these blood vessels also help nourish your eyes, reduced blood flow can cause sudden, painless vision loss. This condition is called anterior ischemic optic neuropathy (AION).

Who is at risk for GCA?
GCA affects mostly older people. It is rarely found in anyone younger than 50 years old and is more common around age 70. Women are twice as likely as men to have GCA.

People with northern European ancestry, particularly Scandinavian, are more likely to develop GCA. GCA is rare in Asians and African-Americans.

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Polymyalgia rheumatica (PMR) is an inflammatory disorder involving pain and stiffness in the shoulder and usually the hip. People with PMR are also at increased risk for GCA. PMR can also occur with severe infections and the use of high doses of antibiotics.

What are GCA symptoms?
The symptoms of GCA can vary. Many people have severe headaches, head pain and scalp tenderness, particularly around the temples. GCA can affect your eyesight, causing sudden vision loss or double vision. Blindness caused by GCA generally happens first in one eye, but can also happen in the other eye if the condition is not treated. That is why it is extremely important to be checked by an ophthalmologist right away if you have these symptoms.

Other symptoms may include:
- flu-like symptoms including headache, fatigue, and fever
- blurred vision
- double vision
- scalp tenderness (pain when combing or brushing hair)
- jaw cramps, especially when chewing
- stiffness or pain in the neck, hip or arms
- unexplained weight loss
How is GCA diagnosed?
If you have vision problems, your ophthalmologist will give you a detailed eye examination. He or she will check your visual acuity and measure your eye pressure. Your ophthalmologist will also give you a dilated eye examination to look for signs of damage to the optic nerve or retina. Your doctor also will examine your head. Touching the head may show that the scalp is sensitive and has a tender, thick artery on one side. The affected artery may have a weak pulse or no pulse.

Your doctor will order blood tests. While the tests cannot confirm if you have GCA, they can show whether your body has inflammation (swelling). If the blood tests are normal, you probably do not have GCA. If the blood tests are abnormal, you will need a biopsy (sample of tissue) taken from your temple artery to confirm the findings of the blood tests. If there is inflammation in the artery, you will need steroid treatment.

Your doctor may order imaging tests, such as an MRI, to check the health of your arteries. You may also have a visual field test to see if you have lost any peripheral vision.

How is GCA treated?
Your doctor will likely prescribe steroid tablets for you to take. Your doctor may not wait until he or she confirms you have GCA to give you steroid tablets. It is important to treat GCA as soon as possible to prevent vision loss. Many people feel better soon after starting treatment, but the treatment can last as long as two years.

If you have lost vision from GCA, your vision will likely stabilize once you start the steroids. However, any vision loss you already have may be permanent. In such cases, learning to make the most of your remaining vision will help you keep your independence.

You will need to be carefully monitored by your doctor while you are on this medication. Steroid medications can have side effects, including increasing your chance of broken bones.

There is also another medicine (tocilizumab) now approved by the FDA to treat GCA. This medicine is given by injection and can be done at the doctor’s office or on your own at home. Tocilizumab may not be the right medicine for people who have had certain infections or diseases. Talk to your doctor to see if you are a good candidate for this medicine.
Summary
Giant cell arteritis (GCA) is inflammation of arteries. Because these arteries also help nourish your eyes, reduced blood flow can cause sudden, painless vision loss. If your ophthalmologist thinks that you have GCA, he or she will give you a dilated eye exam, order blood work, and will likely prescribe steroid tablets. In some cases, treatment may include a medicine called tocilizumab. It is important to treat GCA as soon as possible to prevent vision loss.

Get more information about giant cell arteritis from EyeSmart—provided by the American Academy of Ophthalmology—at aao.org/giant-cell-arteritis-link.