

# What You Should Know About Arterial Macroaneurysms

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Arterial macroaneurysms are dilated places in the arteries of the retina, the lining of the back of the eye. Macroaneurysms are weak spots, which can leak clear fluid into the retina, causing gradually developing blurred vision. They also can pop, with bleeding inside the eye and sudden visual loss. There is no pain associated with macroaneurysms. Pictures of a normal retina and of a retina with a macroaneurysm are shown below.

**Normal Retina**



**Retina with Macroaneurysm**



Legend: The macroaneurysm is indicated by the arrow

## What Causes Arterial Macroaneurysms?

The causes of macroaneurysms are unknown, but we know of certain associated risk factors. Macroaneurysms tend to occur more commonly in women than men (3:1 ratio), occur late in life, and often occur in patients with high blood pressure and other forms of vascular disease, such as heart attacks and strokes. From these clues, we think that hormones, wear and tear over time, and extra stress from high blood pressure may contribute to macroaneurysms.

## How Are Macroaneurysms Discovered?

Sometimes they can be found by your ophthalmologist simply looking inside the eye. Other times they may be covered by blood, and dye pictures may be taken to help in finding them. Occasionally, after cases of rupture, they become evident only after blood has reabsorbed.

## **What Should Be Done For Macroaneurysms?**

Every case is different, but in general, ophthalmologists take a conservative approach to macroaneurysms, since they often spontaneously turn into scars, and cause no further problems. If a major hemorrhage has occurred with severe visual loss, an operation called a vitrectomy may be recommended to restore vision. If leakage invades the center of the retina, called the macula, resulting in difficulty reading or driving, then laser treatment of the macroaneurysm may be recommended.

## **What Is the Follow-up Care?**

Patients should be re-examined periodically to monitor the macroaneurysms and to look for new ones. Sometimes more than one will develop in the same eye. Other cases have both eyes involved. Patients should address any untreated high blood pressure which may contribute to the problem, and should avoid smoking and treat elevated cholesterol and low density lipoproteins, which are toxic to blood vessels.

After reading about macroaneurysms here, if you wish to learn more, please go to my website [www.retinareference.com](http://www.retinareference.com) or Pubmed, sponsored by the National Library of Medicine, at [www.pubmed.com](http://www.pubmed.com).

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