Transient Vision Loss

What is transient vision loss?

Vision loss that is temporary (transient) is a common problem and has many potential causes. **Patients with temporary vision loss often do not have any abnormalities on their eye examination, especially once the vision has returned to normal.** Your doctor may need to rely on your description of the vision problem to help determine what testing needs to be performed and what the possible causes may be.

What are the possible causes of a temporary vision problem?

There are many causes of temporary vision loss:

- **Migraine** (Figure 1)
- **Spasm of blood vessels** to the retina (back part of the eye that senses light)
- **Blood flow problems** to the eye, optic nerves, or brain
- **Swelling of the optic nerve** (especially if the vision problem happens when coughing, bending over, or sneezing)
- Eye surface problems, like **dry eyes**
- **Multiple sclerosis**: the vision can get worse temporarily with heat or exercise (Uhthoff’s phenomenon)
- **Seizures** (very rare)

What is the doctor looking for when examining my eyes?

The eye examination is often normal in patients with a temporary vision problem. However, a careful eye examination may reveal abnormalities that help narrow down the possible causes of a temporary vision problem. Your doctor will talk to you about any abnormalities during your examination and what they mean.
What additional testing may be performed?

In some patients, additional testing may be helpful:

Visual Field Testing

This test evaluates your side vision to determine if a spell of transient visual loss may have left a persistent abnormality. This testing can be helpful even if you feel your vision is normal, since you may not be fully aware of vision loss on the sides (periphery) of your vision.

Fluorescein Angiography

This imaging technique involves giving a yellow dye through an IV in the arm. A camera takes a series of pictures of the dye traveling through the blood vessels in the back of the eye (retina). This allows your doctor to see abnormalities of the retinal blood vessels.

Carotid Artery Ultrasound

This test uses sound waves to image the large arteries in your neck (carotid arteries). The ultrasound looks for abnormal narrowing of these arteries, which can form clots that travel to the eye or brain.

Cardiac Echocardiogram

This is a heart ultrasound that can look for any evidence of a clot or other heart abnormality that could temporarily block off a blood vessel in the head or eye and cause vision loss.

Blood Testing

Blood testing can be helpful in some cases by looking for evidence of inflammation in the body (ESR and CRP tests) or an abnormal tendency toward blood clotting.
Computed Tomography Angiography (CTA), Magnetic Resonance Imaging or Angiography (MRI/MRA)

CTA and MRA are scans that usually involve a contrast dye injected into a vein that circulates into the arteries, at which time pictures of the blood vessels are taken, usually in the head and neck in patients with vision loss. This provides information about any blood vessels that may be blocked, narrowed, or have another abnormality that could affect vision. An MRI of the brain and/or eye sockets (orbits) may be helpful in looking for evidence of new or past strokes or other abnormalities that could be related to the vision problem (Figure 2).

What are the treatment options?

Treatment of your temporary vision problem depends on what is causing it. Some conditions aren’t dangerous and do not require any treatment. In some cases treatment may be helpful in preventing permanent visual loss or other neurologic problems. Your doctor will talk to you about what treatment is right for you.