CONDITION

Amaurosis fugax

Learn how amaurosis fugax causes temporary vision loss in one eye, why urgent assessment matters, and how doctors identify and manage its cause.

WHAT IT IS
Temporary loss or dimming of vision in one eye

BODY SYSTEM
Eyes and circulation

MAIN SYMPTOMS
Sudden painless vision loss, curtain or shadow across sight, partial visual field loss, recovery within minutes

WHAT CAUSES IT
Usually brief reduced retinal blood flow

HOW IT IS DIAGNOSED
Episode history and cause-directed imaging and heart tests

MAIN TREATMENT
Underlying cause treatment and clot prevention

CAN IT BE CURED?
Sometimes, underlying cause may be treated

IS IT AN EMERGENCY?
Yes, sudden vision loss in one eye

LONG-TERM OUTLOOK
Vision often returns but blindness or stroke can occur

Overview

Amaurosis fugax is a temporary loss or dimming of vision, usually in one eye. The term comes from words meaning "fleeting darkness." Vision often returns within minutes, although an episode can be shorter or longer.

Amaurosis fugax describes a symptom rather than a single disease. It is often caused by a brief reduction in blood flow to the retina, the light-sensitive tissue at the back of the eye. This is sometimes called transient monocular vision loss or a retinal transient ischemic attack, also known as a retinal TIA.

A retinal TIA can be a warning that another blood vessel, including one supplying the brain, is at risk of becoming blocked. Because of this connection, sudden painless vision loss in one eye

needs urgent medical assessment even when sight has returned completely. The goal is to protect both vision and brain function by finding and treating the cause.

Not every brief visual disturbance is amaurosis fugax. Migraine, problems within the eye, reduced blood pressure, and other conditions can produce similar symptoms. A medical evaluation is needed to tell them apart.

If vision loss is happening now, has happened recently, or is accompanied by weakness, numbness, trouble speaking, severe imbalance, or facial drooping, call emergency services. Do not drive yourself. A fully resolved episode still warrants same-day emergency assessment.

Symptoms

The typical symptom is sudden, painless dimming or loss of vision in one eye. People may describe a curtain, shade, cloud, or dark area moving across their sight. The change may affect all of the eye's vision or only part of the visual field.

Common descriptions include:

It can be difficult to tell whether a disturbance affected one eye or the same side of vision in both eyes. Covering each eye separately during an episode, if this can be done safely, may help clarify the pattern. Do not delay emergency care to perform this check.

Flashing or zigzag lights that gradually expand, especially when seen through both eyes, can occur with migraine aura. However, visual symptoms should not be assumed to be migraine when they are new, sudden, limited to one eye, or different from previous episodes.

Eye pain, redness, halos around lights, or nausea may suggest a different eye emergency. Persistent vision loss may represent a retinal artery blockage rather than amaurosis fugax and requires immediate emergency evaluation.

In adults over age 50, temporary vision loss together with a new headache, scalp tenderness, jaw pain while chewing, fever, unexplained fatigue, or aching around the shoulders or hips may indicate giant cell arteritis. This is inflammation of medium and large arteries and requires urgent treatment to reduce the risk of permanent blindness.

- Vision becoming gray, dark, blurry, or briefly absent
- A shadow moving from one direction across one eye
- Loss of the upper or lower part of the visual field
- An episode lasting seconds to minutes, followed by recovery
- More than one similar episode over time

Causes and risk factors

A common cause is a small piece of material, called an embolus, briefly blocking a retinal artery. The material may come from fatty plaque in the carotid artery in the neck. It can also come from the heart, particularly when an abnormal rhythm or heart condition allows a blood clot to form.

Atherosclerosis is the buildup of fatty plaque inside arteries. Factors associated with atherosclerosis and blood vessel disease include high blood pressure, high cholesterol, diabetes, smoking, older age, and a history of TIA, stroke, heart disease, or disease in other arteries.

Atrial fibrillation is an irregular heart rhythm that can allow blood to pool and clot inside the heart. Other possible heart-related sources include heart valve disease, recent heart injury, or abnormalities in the heart's structure.

Giant cell arteritis can reduce blood flow through arteries supplying the eyes. It occurs in adults over age 50. Prompt recognition matters because the other eye can also become affected if the inflammation is not treated.

Less common causes include severe narrowing of blood vessels, a sudden fall in blood pressure, inflammation of other blood vessels, blood conditions that affect clotting or thickness, and a tear in the wall of a neck artery. A carotid artery tear, called a dissection, may occur spontaneously or after neck injury and can be associated with neck pain or a drooping eyelid.

Conditions within the eye can mimic amaurosis fugax. These include changes in the gel inside the eye, retinal problems, intermittent pressure changes, and optic nerve disorders. Migraine can also cause temporary visual symptoms, but it should be distinguished from reduced retinal blood flow.

The likely cause depends on age, medical history, the exact visual pattern, and examination findings. Risk factors alone cannot confirm the diagnosis.

Diagnosis

Diagnosis begins with a careful description of the episode. A clinician may ask which eye was affected, how suddenly the change began, what the visual loss looked like, how long it lasted, and whether vision returned fully. Headache, eye pain, neck pain, jaw discomfort, and neurological symptoms are also important.

The examination may include visual acuity, pupils, side vision, eye pressure, and inspection of

the retina and optic nerve. A neurological examination checks strength, sensation, balance, speech, and facial movement. Blood pressure, pulse, heart rhythm, and circulation in the neck may also be assessed.

The eye examination can appear normal after vision returns. A normal examination does not rule out a retinal TIA.

When reduced retinal blood flow is suspected, testing may include:

For a person over 50 with symptoms suggesting giant cell arteritis, blood tests commonly include C-reactive protein, erythrocyte sedimentation rate, and a blood count. These tests look for signs of inflammation but cannot establish or exclude the condition by themselves. Ultrasound or biopsy of the temporal artery may help confirm the diagnosis. Treatment may begin before confirmation when clinical concern is high.

Doctors also consider whether the disturbance came from the eye, the optic nerve, or the parts of the brain that process vision. Visual loss on the same side of both eyes may point to a brain-related cause rather than a problem in one retina.

- Brain imaging, often MRI or CT depending on urgency and availability
- Imaging of the head and neck arteries with CT angiography, MR angiography, or carotid ultrasound
- An electrocardiogram to check heart rhythm
- Heart rhythm monitoring to look for intermittent atrial fibrillation
- An echocardiogram, which uses ultrasound to examine the heart
- Blood tests for cholesterol, diabetes, anemia, platelet problems, and other relevant conditions

Treatment and management

Treatment depends on the cause. The first step is urgent assessment for a retinal or cerebral TIA, retinal artery blockage, and other time-sensitive conditions. There is no single treatment that is appropriate for every episode.

If a non-cardioembolic TIA is suspected, clinicians may recommend an antiplatelet medicine, which makes platelets less likely to form a clot. Aspirin and other antiplatelet medicines are examples. The choice and duration depend on the diagnosis, bleeding risk, timing, and findings from the evaluation. These medicines should not be started or changed without medical guidance.

When atrial fibrillation or another heart-related source is found, an anticoagulant may be

considered. Anticoagulants like warfarin or apixaban interfere with the blood-clotting process and are different from antiplatelet medicines. The benefits and bleeding risks must be assessed for the individual.

Cholesterol-lowering treatment may be recommended when atherosclerosis is present or vascular risk is high. Management may also address high blood pressure and diabetes. Smoking cessation is particularly important because tobacco damages blood vessels and increases clotting risk.

Significant narrowing of a carotid artery may require evaluation by a vascular or stroke specialist. Carotid endarterectomy is an operation that removes plaque from the artery. Carotid stenting is another procedure that can hold the artery open. These procedures are used only in selected patients after considering the degree and location of narrowing, recent symptoms, overall health, and procedural risk.

Suspected giant cell arteritis is treated urgently with corticosteroids like prednisone or hydrocortisone , medicines that reduce artery inflammation. Doctors generally do not wait for a biopsy result when delaying treatment could threaten vision. Ongoing care may involve a rheumatologist and monitoring for treatment effects.

If an eye condition, migraine, low blood pressure, or another disorder caused the episode, treatment is directed at that problem. Avoiding a presumed trigger is not a substitute for evaluation of a first or unexplained episode.

Long-term management may include regular physical activity, a heart-healthy eating pattern, taking prescribed medicines consistently, and keeping follow-up appointments. Changes should be planned with a healthcare professional, particularly after a recent TIA or in the presence of heart or artery disease.

Complications

The main concern is that the blood-flow problem may recur or progress. A complete retinal artery blockage can cause lasting vision loss. A clot or severe artery narrowing can also lead to a TIA or stroke involving the brain.

Complications depend on the underlying cause. Untreated giant cell arteritis can affect the other eye and may involve other large arteries. Atrial fibrillation and carotid atherosclerosis can cause clots in other parts of the circulation.

Prompt evaluation does not mean that a complication will occur. It allows clinicians to identify treatable risks and begin prevention as early as possible.

Follow up

Initial care for suspected amaurosis fugax is urgent rather than a routine eye appointment. After the emergency assessment, follow-up may involve an ophthalmologist, neurologist or stroke specialist, primary care clinician, cardiologist, rheumatologist, or vascular surgeon, depending on the findings.

Follow-up commonly focuses on test results, medicine safety, blood pressure, cholesterol, diabetes, smoking, and any recommended heart or artery monitoring. Report medication side effects rather than stopping treatment on your own.

Seek emergency care again for any new episode of sudden vision loss, even if it resolves. Also call emergency services for facial drooping, arm or leg weakness, numbness, trouble speaking, confusion, severe imbalance, or a sudden major change in vision.

New headache, scalp tenderness, or jaw pain in an adult over age 50-especially with visual symptoms-also requires urgent same-day assessment. Routine follow-up is appropriate only after time-sensitive causes have been evaluated and a care plan is in place.

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