



MACULAR TELANGIECTASIA

What is macular telangiectasia?

Macular telangiectasia (also known as *Mac-Tel*) is an uncommon disease that affects the macula and can cause loss of central vision.

How Mac-Tel affects vision

Light enters the eye and is focused onto the **retina**, the light-sensing part of the eye. This information is transmitted through the **optic nerve** to the brain where it is interpreted as the images you see.

The **macula** is the part of the retina responsible for central vision. The **fovea** is the center of the macula responsible for sharp detail vision, such as that used for reading and driving.

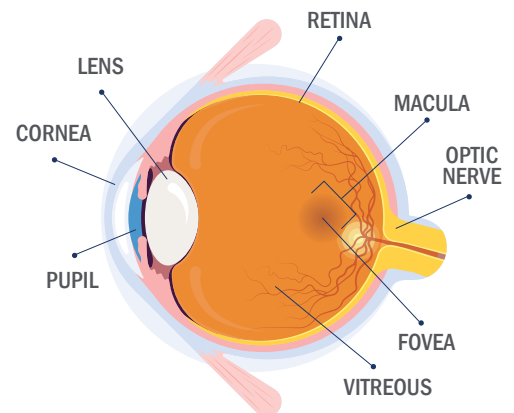
Small blood vessels called **capillaries** supply the macula with oxygen and nutrients. These can dilate and leak, causing an accumulation of fluid called **macular edema**. Sometimes new blood vessels can form under the retina (a process called **choroidal neovascularization**) and also break or leak. Eventually, scarring over the macula can occur, severely affecting vision. In most cases MacTel usually affects both eyes, but can affect each eye differently.

Risk factors for Mac-Tel

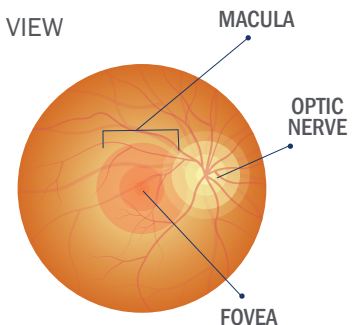
In most cases, the cause is unknown, with no clear connection to other diseases. It is most common diagnosed in people in their 40s and 50s. Other risk factors can include:

- Underlying high blood pressure or diabetes
- Radiation to the head or neck as part of cancer treatment

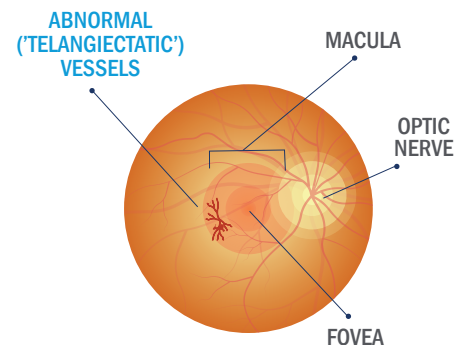
HEALTHY EYE



ANGLED VIEW



AFFECTED EYE



Symptoms of Mac-Tel

The most common symptom of Mac-Tel is gradual, progressive blurred central vision in one or both eyes. Other symptoms, such as distorted vision or 'blank spots,' may occur. In some cases, Mac-Tel can cause a sudden decrease in central vision.

Examination and diagnostic testing

Your ophthalmologist may request diagnostic tests including **photography**, **ocular coherence tomography (OCT)** and **fluorescein angiography** to facilitate diagnosis and discuss treatment options.

Treating Mac-Tel

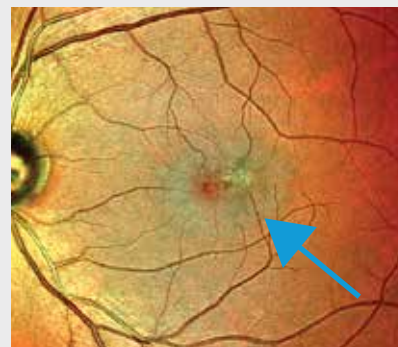
Depending on the type and stage of Mac-Tel, as well as the possible development of secondary choroidal neovascularization, treatment may include injections of medications such as **Lucentis**, **Avastin** or **Eylea**. Rarely, it may be treated with **photocoagulation**. Because Mac-Tel rarely causes severe vision loss, many cases are treated with close clinical observation.

WHAT YOUR DOCTOR SEES

With Photography

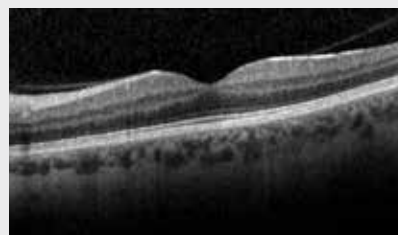


Normal macula



Area of abnormal vessels in the macula

On OCT



Normal macula, as seen on OCT



Cystic changes consistent with Mac-Tel



Retina
Consultants
of Texas



RCA
Research

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