

Macular Pucker (ERM)

What is the macula?

The macula is the small area at the center of the eye's retina that allows you to see fine details clearly. The retina is a layer of light-sensing cells lining the back of your eye. As light rays enter your eye, the retina converts the rays into signals, which are sent through the optic nerve to your brain where they are recognized as images.

Damage to your macula causes blurred central vision, making it difficult to perform tasks such as reading small print or threading a needle.

What is a macular pucker?

The macula normally lies flat against the back of the eye, like film lining the back of a camera. When wrinkles, creases or bulges form on the macula, this is known as **macular pucker** or **epiretinal membrane (ERM)**.

What are the symptoms of macular pucker?

Symptoms of macular pucker range from mild to severe and may involve one or both eyes. Symptoms may include:

- Blurred central (detail) vision;
- Distorted or "wavy" vision;
- Difficulty reading or performing tasks that require detail vision;
- Gray and/or cloudy area in central vision;
- Central blind spot.

Peripheral (side) vision is not affected.

What causes macular pucker?

As you age, the vitreous—the clear, gel-like substance that fills the middle of your eye—begins to shrink and pull away from the retina. As the vitreous pulls away, scar tissue may develop on the macula. Sometimes the scar tissue can warp and contract, causing the retina to wrinkle or bulge.

Eye conditions associated with macular pucker include:

- Vitreous detachment
- Torn or detached retina;
- Inflammation inside the eye;
- Severe trauma to the eye (from surgery or injury);
- Disorders of the blood vessels in the retina.

How is macular pucker detected?

Your ophthalmologist detects macular pucker by examining your retina. He or she may perform fluorescein angiography or optical coherence tomography (OCT)—procedures that take special photographs of the eye. These photographs show if an abnormality exists in your retina.

How is macular pucker treated?

For mild symptoms, no treatment may be necessary. Updating your eyeglasses prescription or wearing bifocals may improve vision. Eye drops, medicines or laser surgery do not improve vision.

For more severe symptoms, a surgery called **vitrectomy** is recommended. The surgery is usually performed as an outpatient procedure in an operating room. During surgery, your ophthalmologist uses tiny instruments to remove the wrinkled tissue on your macula. After the tissue is gone, the macula flattens and vision slowly improves, though it usually does not return all the way to normal.

You should consider surgery if your symptoms are interfering with your daily activities.

Are any risks involved with vitrectomy surgery?

As with any surgical procedure, rare complications can occur, including, but not limited to:

- Infection;

- Bleeding;
- Retinal detachment;
- Recurrence of macular pucker.

After surgery, cataracts (clouding of the eye's natural lens) may also develop sooner. Be sure to discuss potential complications with your ophthalmologist before surgery.