

MACULAR PUCKER (EPIRETINAL MEMBRANE)

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. If wrinkles, creases, or bulges form on the macula, it is known as **macular pucker** or an **epiretinal membrane**.

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 vision;
- distorted, or "wavy," vision;
- difficulty reading or performing tasks that require normal central vision;
- gray and/or cloudy area in the central vision;

WHAT CAUSES MACULAR PUCKER?

As you age the vitreous, the gel-like substance that fills the middle of your eye, begins to shrink. It pulls away from the retina resulting in a normal separation of the vitreous from the retina (vitreous detachment). This can lead to the formation of scar tissue on the macula. If the scar tissue contracts, the macula becomes wrinkled or puckered. The wrinkled scar tissue is often referred to as an epiretinal membrane.

Other eye conditions that can cause a macular pucker include:

- 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.

HOW IS MACULAR PUCKER TREATED?

For mild symptoms, no treatment is recommended. Updating your eyeglass prescription may improve vision. Eye drops, medicines or laser surgery do not improve vision. For more severe symptoms, surgery is often recommended. The surgery is usually performed as an outpatient procedure in an operating room. During surgery, your ophthalmologist performs a vitrectomy (the removal of vitreous gel from the back of the eye) and uses instruments to remove the wrinkled scar tissue on your macula. After the epiretinal membrane is gone, the macula flattens. Vision slowly improves, though it usually does not return all the way to normal. You should consider surgery only if your blurred vision is significantly interfering with your daily activities. The surgery is not always successful and does entail risk.

WHAT ARE THE RISKS INVOLVED WITH THE SURGERY?

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

- infection;
- bleeding;
- retinal detachment;
- poor vision;
- recurrence of macular pucker.

After surgery, a cataract (clouding of the eye's lens) often develops. Be sure to discuss potential complications with your ophthalmologist before surgery.