



Epiretinal Membrane & Macular Holes

Epiretinal membrane, macular pucker, cellophane maculopathy is terminology used to describe thickening of the back layer of the vitreous gel as it attaches to the central area of vision in the retina called the macula. This is a condensation of the vitreous gel, a Jell-O-like clear substance comprising the bulk volume of the back of the eye, where it contacts with the retinal surface. This layer will sometimes thicken in eyes after intraocular surgery, with aging changes, and particularly with episodes of ocular inflammation or diabetic eye disease. Epiretinal membrane is oftentimes associated with distorted or wavy vision as well as blurred vision.

Epiretinal membranes can lead to secondary macular edema (see cystoid macular edema). This can lead to loss of the quality of vision. If the visual acuity is significantly affected with a decrease in clarity of vision or if distortion is bothersome then surgical intervention can be pursued. The surgery involves micro-dissection of the scar tissue layer off of the central macula area in a procedure called vitrectomy where the vitreous gel is removed from the eye and replaced by an artificial eye fluid. The surgery is successful more than 95% of the time with an improvement in vision as well as relief of image distortion. Sometimes surgery can be avoided with the use of aggressive treatments for the macular edema alone. These medical treatments are useful in the setting where traction is not causing distortion of the retinal surface.

Epiretinal membrane and traction at the macula can also lead to formation of partial or full thickness macular holes in the retina. This is where the scar tissue sheet pulls on the retina so vigorously as to lead to a partial loss of the macular tissue or complete loss of the macular tissue leading to a blurred spot in the image or blank spot in the vision. Partial macular holes are generally observed, as they tend to improve with recovery of visual function; however, macular holes are repaired surgically and have a very high success rate of 97% for restoration of vision. The decision-making process for proceeding to surgery will be directed by the retina specialist. Recent developments in retinal surgery have led to very high success rates with surgical procedures, even in some of the most difficult cases. As noted above, new advances in retinal disease care have led to significant improvements in visual function in the setting of these disorders. It should be noted that oftentimes one may not perceive the change in vision if the vision is not checked one eye at a time.