

Anterior Basement Membrane Corneal Dystrophy

This material will help you understand anterior basement membrane corneal dystrophy (ABMD) and how it is treated.

What is ABMD?

Corneal dystrophies are a group of genetic disorders. The cornea is the clear window in the front of the eye (see picture on the right). The cornea is made up of three layers. There is a thin outside layer and a tough inner layer. The tough inner layer gives the cornea its strength. There is also a thin inside layer that contains cells whose job it is to pump water out of the cornea to keep it clear. ABMD is a type of corneal



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dystrophy that affects the thin outside layer of the cornea. This layer is called the epithelium.

What causes ABMD?

ABMD occurs when the epithelium does not develop properly. It may have trouble sticking to the tough inner layer of the cornea called the stroma. A person with ABMD may easily develop a scratch or erosion on the cornea, even from very minor trauma like rubbing or opening the eyes. Most people with ABMD never have this problem, but some do.

Some people even have a problem called "recurrent erosions." This is when the epithelium continues to come off the stroma in patches when the eyes are opened or rubbed. These erosions can be very painful, causing light sensitivity and blurred vision. These usually heal on their own in a day or two and leave no lasting effects on the vision. But they can return.

How is ABMD treated?

If you have epithelial erosion, your doctor may recommend a variety of treatments. One option is very frequent lubrication with over-the-counter artificial tears. Artificial tears with preservatives can be used 4-6 times a day, and those without preservatives can be used as much as needed. Other options include ointments or antibiotics, depending on how bad the erosion is. If you have recurrent epithelial erosions, your doctor may recommend a procedure to help the epithelium stick better to the stroma. Your eye doctor may scrape the ragged part of the epithelium, either with a surgical tool or with a laser. S/he may also use another procedure that makes tiny punctures in the epithelium. The scars from these punctures help it to stick better to the stroma.

For more information, scan this code with your smartphone or visit the websites listed.



http://www.geteyesmart.org/eyesmart/diseases/corneal-dystrophies/index.cfm

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