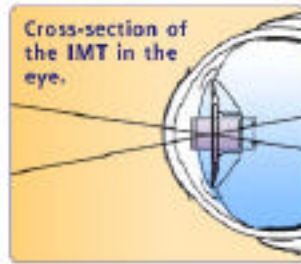


Implantable Microscope Technology

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IMT
technologies



VisionCare Inc.

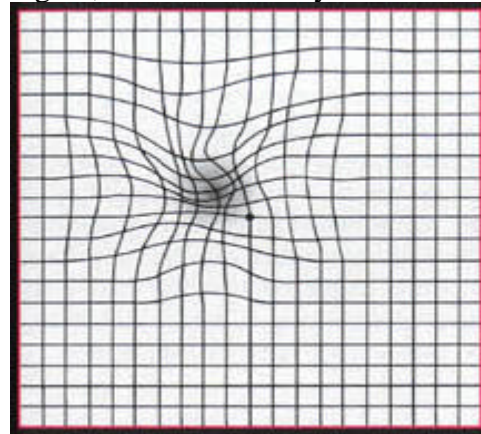
has developed a new device that helps ease the adverse effects of age related macular degeneration (AMD). This disease affects over 1.6 million aging Americans. It is the most common reason for vision loss of people over the age of 55. The symptoms of the disease are a loss of central vision. Some people may find that they are having trouble recognizing others (facial characteristics), reading the newspaper, and may feel disoriented at times. This may result from the patient losing their central vision, which is what AMD impairs.

AMD causes the center of the retina to deteriorate, causing the central vision. The first implantable microscope was developed by VisionCare to help improve this problem. The 45 milligram telescope replaces the eye's lens, magnifying the central region of vision. The blind spot may decrease due to this treatment and vision may improve after the brain has gotten accustomed to the change.

A common way of identifying the disorder is the Amsler Grid, which looks like a piece of graph paper. The patient should focus at the center of the page, if the lines appear distorted, then this is a reasonable sign of AMD.

There are two types of AMD: dry and wet. Dry AMD represents 90% of AMD cases. This condition, yellow age spots

called drusen are present on the macular region, the core of the eye.



This impairs vision slightly, but isn't a serious condition compared to wet AMD, which causes 90% of severe vision loss. In wet AMD, abnormal blood vessels, called subretinal neovascularization, grow under the macula and leak blood and fluid. This condition can be recognized early by using fluorescein angiography. It can then be treated by laser surgery. The laser surgery may stop or slow the fading vision. However, the laser treatment may only stop the abnormal cells for a short period of time, or the abnormal cells may start growing in other regions. If untreated, the cells will continue to grow into the fovea region, which will seriously impair vision. The implant has been seen as effective in both forms. However, if the abnormal cells are not contained before they expand into the fovea, the implant will not be a huge help.

The microscope is still in testing stages and is not available yet for patients outside of specific case studies.

References:

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