



THE MAGNIFIER

Macular Degeneration Foundation
P.O. Box 531313
Henderson, Nevada 89053

FREE MATTER FOR THE BLIND

Macular
Degeneration
Foundation

The Magnifier

ISSUE #98
Jan-Mar 2015



Book on CD

A recorded copy of "Macular Degeneration, "The Complete Guide to Saving and Maximizing Your Sight", by Lylas G Mogk, M.D. is now available on CD.

Sight Into Sound is making it available upon request.

Call 713-622-2767 or email carol.pierce@sightintosound.org

Free DVD

Hallucinations: Am I going Crazy?

AMD and Charles Bonnet Syndrome. DVD available on request with detailed information! Call: 888-633-3937

Kick The Habit, Save Your Eyesight

By Ross Britten

We are all aware of the links between smoking and cancer but most of us don't know that smoking can severely damage our eyes and in some cases even lead to sight loss. In fact, only 15% of smokers are worried about the impact the habit has on their vision.

We've been working with top ophthalmologist Dr Alexander Ionides from Moorfields Eye Hospital to give you another reason to quit - to save your eyes.

Research shows that smoking cigarettes dramatically increases your chances of developing eye conditions such as glaucoma and cataracts, which remain one of the biggest causes of sight loss in the UK. Lighting up can also make you four times more likely to develop macular degeneration in later life. All of these eye conditions can lead to vision loss in one or both eyes.

According to Dr Ionides, smoking can also lead to a more rapid deterioration of vision loss for people with pre-existing eye conditions, while smoking will worsen problems associated with thyroid eye disease. People with diabetes should also avoid smoking, as it can make diabetic sight problems, such as diabetic retinopathy much worse.

Clinical Trial Information

Nat'l Eye Institute
800-411-1222 or www.nei.nih.gov

Clinical trials have guidelines called "inclusion" and "exclusion" criteria. These criteria (age, gender, type and stage of disease, etc.) keep participants safe and ensure researchers will be able to answer the questions they plan to study.

Simulated Blindness May Not Help Others Understand

Simulating blindness can have negative effects on people's perceptions of the visually impaired. According to a study done at the University of Colorado, techniques such as dining in the dark and wearing a blindfold around the house may not be as helpful to others, as believed. "When people think about what it would be like to be blind, they take from their own brief and relatively superficial experience and imagine it would be really, really terrible and that they wouldn't be able to function well," said Arielle Silverman, who is lead author of the paper. This perception often gives them a false expectation of what a blind person would be able to accomplish in a work setting or in social settings. It is important to mention that Arielle Silverman is blind and conducted the research as part of her doctoral dissertation in CU-Boulder's Department of Psychology and now is a post-doctoral researcher at the University of Washington in Seattle.

Resource Consultant

For assistance identifying agencies in a specific area, call

Dan Roberts
Resource Consultant

toll free at:
1-888-866-6148

Resources

NFB Newsline
866-504-7300

Choice Magazine
Listening
888-724-6423

National Library
Service
888-657-7273
(Audio Books)

Free Low Vision
Catalogs and
Independent
Living Catalog
800-537-2118

Maxi Aids
800-522-6294

Enhanced Vision
888-811-3161

EyeSmart
<http://www.get-eyesmart.org/eyesmart>

Questions to Liz



Question: "What can I do about depression?"

Depression is a common risk for people who have lost their vision from age-related macular degeneration (AMD), but a new study by the National Eye Institute shows that a type of rehabilitation therapy can cut this risk in half.

Activities that used to be fun and fulfilling may begin to seem burdensome or even impossible. With loss of the ability to drive and navigate unfamiliar places, it becomes easier to stay at home than to see friends or meet new people. All of this can take a toll on mental health, and past studies have found that as many as one-third of people with bilateral AMD develop clinical depression.

"The depression is a response to disability, so we reasoned an effective treatment would be to reduce the disability through rehabilitation," Dr. Rovner said.

In the Low Vision Depression Prevention Trial (VITAL), he led a team of psychologists, ophthalmologists, optometrists, and occupational therapists to test an approach called behavior activation.

"Behavior activation involves helping people to focus on activities they enjoy, to recognize that loss of those activities can lead to depression, and to re-engage in those activities," said Robin Casten, Ph.D. Helping people maintain an active social life is an important part of the approach, she said.

Dr. Rovner said he hopes the study will serve as a model for similar approaches to preventing and treating depression in AMD. When approved by a physician, occupational therapy is reimbursable through Medicare.

"We built this to be an affordable treatment. Now we would like to see it become accessible," he said. The study is continuing to follow participants to see if the benefits of treatment are maintained out to one year.

For the complete article see "Low Vision Depression Prevention Trial in Age-Related Macular Degeneration." Ophthalmology. July 2014

Exclusive Online Videos Featuring World's Leading Eye Researchers



Dr. David Seftel, Director of Research Development for the Macular Degeneration Foundation, is interviewing the world's foremost scientists and medical practitioners who are actively investigating cures and treatments

for Macular Degeneration and related eye diseases.

Visit **MacularNews.org** for the latest news and register to receive an email notice when new videos are first posted.

Donations

The Macular Degeneration Foundation, Inc. is a tax-exempt, non-profit organization.

Please visit our website at eyesight.org to make a tax deductible donation.

Checks may be mailed to:

Macular Degeneration
Foundation, Inc.,
P.O. Box 531313,
Henderson, NV 89053

Call: 888-633-3937 (USA)
Call: 702-450-2908 (Intl)
Email: liz@eyesight.org

Disclaimer - Articles in the Magnifier are for information only and are not an endorsement by the Macular Degeneration Foundation editorial staff.

Organizations That Can Help

National Eye
Institute
800-411-1222
www.nei.nih.gov

AMD Alliance
amdalliance.org
416-486-2500
x-7505

Foundation
Fighting Blindness
888-394-3937
blindness.org

MD Partnership
888-430-9898
amd.org

Prevent Blindness
America
800-331-2020
preventblindness.org

MD Support
816-761-7080
Mdsupport.org

EARS
Free Tapes to
live life with confi-
dence and dignity.
800-843-6816

Definitions

Ophthalmologist

a practitioner in the medical science of surgery and care of the eye and its related structures. An M.D. degree is required.

Retina specialist

a medical doctor trained as an ophthalmologist, who has received additional training in diseases and surgery of the retina and vitreous.

Optometrist

a degreed (O.D.), independent, primary health care provider skilled in the co-management of eye health and vision care, including examination, diagnosis, treatment, management of diseases/disorders, prescription of eye-glasses/contact lenses, and provision of low vision aids and therapy.

Optician

a person who designs or manufactures ophthalmic appliances or optical instruments ("ophthalmic optician") or deals in prescriptions ("dispensing optician").

News from the Library of Congress

Braille and Talking-Book Program Embraces New Braille Code

The National Library Service for the Blind and Physically Handicapped (NLS), part of the Library of Congress, will implement the Unified English Braille (UEB) code on Jan. 4, 2016—the 207th birthday of Louis Braille.

"This is the first extensive change to the English braille code, a major literacy tool, since the 1930s," said NLS Director Karen Keninger. "The new code will be especially beneficial to students and other users of technology. It resolves persistent translation errors that occur when, for example, a student's work is translated to print for a teacher to read, or when print material is translated to braille." Those who use computers, smartphones, e-books and texting features will find it very useful.

The code, which has been adopted by seven other English-speaking countries, brings the braille code into the computer age. "UEB is not much different from the English Braille American Edition that we've been using," Keninger said. UEB uses the same six-dot cell pattern as the present code, but drops some contractions, uses different spacing rules, and allows for transliterating a wider array of symbols.

Beginning Jan. 4, 2016, all books added to the braille collection will be produced in UEB. "Current patrons should make the transition easily as the new code builds on the old system," said Keninger. Existing braille books will remain in the collection and be available. The UEB books are not expected to be available from the collection for at least six months. Patrons will not need to change their equipment.



NLS administers the braille and talking-book program, a free library service available to U.S. residents and American citizens living abroad whose low vision, blindness, or physical disability makes reading regular materials difficult.

Through its national network of libraries, NLS mails books and magazines in audio and braille formats and digital audio equipment directly to enrollees at no cost. Music instructional materials are also available. Selected materials may be downloaded. For more information, visit www.loc.gov/nls/ or call 888-657-7323.

In The News

Cataract Surgery: What Patients Should Know

In an article published recently in www.straitstimes.com, "Care Needed In Choice of Lens Implant", Dr. Jerry Tan emphasizes the important points patients have to consider before deciding which intraocular lens implant to use.

Multifocal intraocular lens implants are not covered by most insurance, therefore, this choice is an out-of-pocket expense for patients and an important consideration. A review of this product revealed 10-15% of patients needed an additional procedure to make the lens work properly. Multifocal implants often cause a loss of contrast acuity and an increased risk of halos, glare, and the loss of vision quality.

Dr. Jerry Tan states, "In all multifocal IOLs, the light is split into distance and near vision, which degrades the brightness, and the focus has to change from near to far, which causes the halos and glare. This is why multifocal implants have to be put into both eyes so that there is no contrast between the normal eye and a multifocal IOL eye. If one has a multifocal IOL and is unhappy with the halos, glare and loss of contrast, it is very difficult to remove an implant without the risk of damaging the cornea and the capsule that holds the implant in the eye. Removing this lens can result in complications such as loss of the vitreous from the eye, retinal detachment, corneal damage and swelling at the back of the retina (macular edema). The use of multifocal IOLs is also discouraged in patients who have had standard Lasik surgery because Lasik already increases the risk of glare and halos."

Indoor GPS System

Organizations for the blind and visually impaired will soon be able to provide indoor navigation technology at their national conferences. The service, called "Audio Guide", is being offered free gratis to charitable organizations by **Macular Degeneration Support**, fully funded by Macular Degeneration Foundation. Beginning in 2015, conference attendees will be able to more easily navigate meeting venues without depending upon sighted human guides. Location information will be transmitted by electronic beacons placed at registration tables, concession areas, exhibit areas, meeting rooms, restrooms, escalators, and elevators. An application specially-designed by Indoo.rs will identify the locations vocally through the user's idevice or Android phone.

MD Support and Prevent Blindness America Establish New On-Line Resource

The new resource provides an extensive list of searchable resource directories, a database of 1,500 municipal paratransit services, a library of self-help guides and workbooks, and up-to-the-minute news.

This marks the first time in Internet history that two major organizations have joined in such a dramatic way to bring both education and support to the entire global low vision community.

See lowvision.preventblindness.org or mdsupport.org

Are You Missing Out on Benefits?

April Issue of AARP by Joan Rattner Hellman

If you're struggling to pay for health care, food, or utilities, help may be closer than you realize.

Older Americans miss out on more than \$20 billion worth of benefits every year. A nationwide campaign launched by the National Council on Aging and the National Association of Area Agencies on Aging aims to help older adults learn about two easily accessed resources that can connect them to needed support.

BenefitsCheckUp (benefitscheckup.org)

Eldercare Locator (1-800-677-1116 or eldercare.gov)

A Glimpse of Technologies in Development

Telescopic Contact Lenses Allow You to Zoom in with a Wink

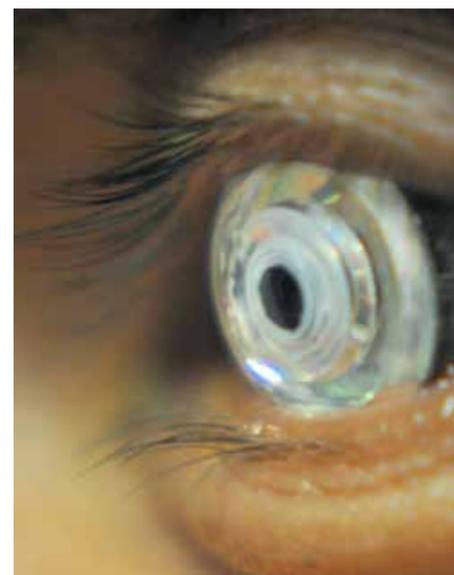
Optics specialist Eric Tremblay from Switzerland has developed a special telescopic contact lens that lets you magnify detail by winking with your right eye, or wink with your left eye for normal vision. This futuristic-sounding contact lens could make a significant difference to quality of vision for those who suffer from low vision and age-related macular degeneration (AMD), by allowing them to switch between normal and magnified vision. This is possible because the 1.5mm thick lens contains a very thin, reflective telescope and small mirrors; which bounce light around and expand perceived size of objects, creating an effect that is similar to looking through low-magnification binoculars.

Telescopic Contact Lens at UC San Diego Jacobs School of Engineering

The telescopic contact lens is constructed using precision-cut plastic, aluminium mirrors and thin, polarising films, held together with biologically safe glues. The lens is kept breathable to ensure a steady supply of oxygen to the eye, thanks to tiny air channels around 0.1mm wide that cover the lens surface.

It is possible to wear these lenses together with glasses that appear to be regular eye-wear, but actually have a small light source detector which will recognise winks and ignore blinks, making it possible for the wearer to control magnification "on-demand".

The telescopic contact lens is still at research stage, but there is hope that it could one day become a real option for sufferers from AMD and low vision, once its current rigid scleral lens construction can be upgraded to a soft contact lens and the technology has been fully safety tested.



(Technologies Continued)

Dissolving Nanowafer Contact Lens Delivers Slow-Release Eye Medicine

Dr. Steven Pflugfelder, professor of ophthalmology at Baylor College of Medicine in Dallas, has co-authored a study into dissolving nanowafer contact lenses, which could be used to dispense slow-release medicines to the eye in a much more effective way than currently available methods. The nanowafer contact lens is just one-twentieth as thick as a standard contact lens, and is made from a thin resin called polyvinyl alcohol, which contains tiny reservoirs that can be filled with slow-release medicines. The lens can be applied directly to the eye and used to treat eye infections or speed up recovery from burns and damage.

Artificial Vision – Where Are We?

After the Detroit World Research Congress "The Eye and The Chip", in September 2014, it is prudent to review where we are in the effort to give some level of useful vision to many persons now blind. Again, as they have every other year at "Chip" congresses, over thirty of the world's leading authorities gathered to evaluate progress. And progress is being made. Efforts in laboratories in at least eleven countries are concentrated on combining what we know about electrical engineering with what we know about the brain and the visual system.

One early device from Second Sight Corporation of Sylmar, California has been given humanitarian approval by the US FDA and is being implanted at several retinal centers here and in Europe and the United Kingdom. With it, we can now take a person who is blind from retinitis pigmentosa, implant the Argus II device, and give that person some sense that daylight has arrived, perhaps some contrast vision such as a white plate against a black tablecloth, even perhaps an indication of a sidewalk against a grass lawn.

Another device, under development in the laboratory of Eberhart Zrenner MD of Tuebingen, Germany, has 1,000 photodiodes and is theoretically more sophisticated. It should produce a much more detailed electronic message for interpretation by the visual cortex of the brain.

Initiatives in Australia, Belgium, China, Germany, Israel, Korea and Spain, should help solve many of the remaining problems. There is a sense of hope today that did not exist just a few years ago.

Follow developments in this field at Artificial Vision (www.artificialvision.org).

by Philip C Hessburg MD, Medical Director, Detroit Institute of Ophthalmology.

Latest Audio Newsletters and Video's from the MD Foundation

Visit MacularNews.org

Talking Books

The National Library Service provides qualifying individuals a bimonthly large print catalog of recorded books and magazine at no charge.

Patrons may order talking books by contacting their local cooperating library. Contact information is online at www.loc.gov/nls/find.html or call 1-888-657-7323

Chaplains on Hand

Chaplainsonhand.org for spiritual support or call toll free 1-844-242-7524