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

FREE MATTER FOR THE BLIND

Clinical Trial Information

Natl 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.

Nutrition of the Eye

http://www.optometry.co.uk

The main nutritional components of the eye are pigments known as carotenoids. There are over 600 known carotenoids in nature. In the human eye, just three of these nutritional pigments – lutein, zeaxanthin and meso-zeaxanthin – form a concentrated 'yellow spot' in the macular, known as the macular pigment. This pigment has two main functions: it acts as an antioxidant and it filters light.

As short wavelength (blue) light passes through the retina to the photoreceptors and pigmented epithelial cells, reactive oxygen species are generated. The conversion of the light energy into a nerve impulse by the photoreceptors generates free radicals – unstable molecules which damage a variety of tissues – resulting in many of the diseases and conditions associated with ageing, like AMD. Antioxidants in the eye are able to quench these free radicals, thereby protecting the eye.

Blue light, because of its relatively high photon energy, more readily damages the retina than yellow or red light, which is less energetic. The macular pigment acts as a filter, particularly to blue light, and therefore protects against this damaging effect.

Macular Degeneration Foundation

The Magnifier

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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

Non-Mydriatic Retinal Cameras Offer Safer, More Detailed Examinations

There is a significant amount of evidence that very bright light, especially blue light, can damage the macula. Traditional table slit lamp devices can output very high light levels (including blue light) which may be problematic for people with macular degeneration. Your pupil needs to be dilated (the mydriatic process) before these devices can be used effectively and the wide open pupil is then subjected to a very bright light for as long as the ophthalmologist is looking at your retina.

Non-mydriatic retinal cameras, on the other hand, do not require your pupil to be dilated first and use low light levels to take high sensitivity digital photographs and videos of your retina. They allow your doctor to get very high resolution imaging of multiple layers in your retina and macular area. They work using special lenses and a high resolution digital camera to take remarkable pictures of multiple layers simultaneously.

It's possible to photograph very fine and subtle changes that are not visible on a standard high-intensity slit lamp in conditions including glaucoma, macular degeneration and diabetic retinopathy. It is also much safer for anyone who needs multiple eye exams.

Not having to have your eye dilated means that you can get in and out of the office much quicker, not have to wear dark glasses and not require additional assistance for several hours after the dilation.

Before your next eye examination, ask your ophthalmologist if they use a non-mydriatic retinal camera.

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
(Books on Tape)

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

The Use of Electrodes for Retinal Stimulation is Being Investigated by Researchers

Microcurrent stimulation (MCS) is a medical treatment involving the application of an extremely small electrical current through the skin of the patient using electrodes. This modality has been FDA approved for wound healing, pain control, and some cosmetic purposes since the 1970's.

Although MCS has been used to treat age-related macular degeneration (AMD) for the past 20 years, it remains in an off-label status for ocular use. "Off-label" indicates that sufficient research has not been completed to obtain full FDA approval.

The chief benefits of MCS are that of supporting and strengthening the weakened retinal cells by increased blood flow to the retina, improved retinal cell membrane permeability and increased adenosine triphosphate (ATP) production.

A diminished blood and oxygen supply is common to many progressive retinal problems, including AMD. The outer retinal blood supply is provided by a layer of blood vessels and capillaries known as the choroid, located immediately behind the retina. MCS is able to increase the diameter of these blood vessels by an increase in the nitric oxide and dopamine in the tissue.

Dr. Monica M. Jablonski in Investigative Ophthalmology and Visual Science. 2007;48: 479-485, strongly supports the finding that an increase of nitric oxide in the retina produces a much improved choroidal blood flow.

It is estimated that about 65% of the patients using MCS to treat age-related macular degeneration are successful in controlling the progression of the AMD. MCS is only one of the conservative measures to be considered with AMD treatment. A strong eye vitamin, and protective eyewear, along with stress management are also very important.

There are a number of US companies which offer MCS units to patients for home use. These units can differ greatly in cost, ease of application, and availability of technical support, if needed.

If you would like copies of published articles or other questions call 800-924-4393.

Ophthalmologists Warn Genetic Tests May Not Accurately Predict Predisposition to Complex Eye Diseases

CHICAGO – November 11, 2012 – The American Academy of Ophthalmology today reiterated its position that at this time its member eye physicians and surgeons should avoid genetic testing for complex eye disorders such as age-related macular degeneration and late-onset primary open angle glaucoma.

The organization discourages patients from undergoing such testing until treatment or surveillance strategies can be shown to be of benefit to individuals with specific disease-associated genotypes and urges medical personnel to confine the genotyping of such patients to research studies.

The Academy believes that currently marketed genetic tests for these eye disorders offer little benefit or additional insight regarding whether a patient is significantly predisposed to a particular disease. Furthermore, the organization strongly believes that a comprehensive eye exam is significantly more effective than any currently available genetic test for identifying treatable disease.

We Appreciate Your Support

Donations

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

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

Organizations That Can Help

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

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

Association for Macular Diseases
212-605-3719
macula.org

Foundation Fighting Blindness
888-394-3937
blindness.org

MD Partnership
888-430-9898
amd.org

Prevent Blindness America
800-331-2020
preventblindness.org

Macula Research Foundation
610-668-6705
mvrf.org

MD Support
816-761-7080
Mdsupport.org

EARS
Free Tapes to live life with confidence 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 eyeglasses/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").

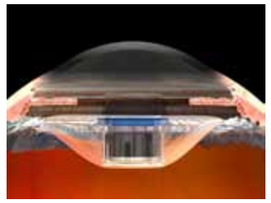
Frequently Asked Questions About the Telescopic Implant

How Does the Implant Work?

CentraSight telescopic implant improves visual acuity by reducing the impact of the central vision blind spot caused by end-stage AMD. Smaller than a pea, the CentraSight telescope implant uses micro-optical technology to magnify images and then project them onto the healthy portion of the retina that would normally be seen in central vision.

How Long Is The Healing Process After Surgery?

The healing process is approximately one month and then another two months before the stitching is removed.



What are the risk factors?

The risks, as with any surgery, are infection, bleeding, and further loss of vision.

How Long Does It Take To Train To Use The Implant?

After the implant, patients must expect three to six months of rehabilitation to train their brain how to use the implant. The extensive visual rehabilitation is needed to train their ability to coordinate and focus on the magnified images produced by the internal telescope.

The telescope procedure, which is covered by Medicare for patients meeting eligibility requirements, is performed on an outpatient basis. Doctors said the telescope implant is not a cure for end-stage AMD, but it can improve quality.

Candidates for the procedure include individuals with untreatable end-stage, age-related macular degeneration (dry form) who are 75 or older and whose disease is stable but severely impairs vision.

They must have adequate peripheral vision in the eye that will not receive the implant and have no other ocular diseases.

Annual PACIFIC RIM CONFERENCE on Disability and Diversity, 2013

Don't miss the 29th Annual Pacific Rim Conference on Disability and Diversity, 2013: Being in Community, April 29th & 30th, 2013 at the Hawaii Convention Center in Honolulu.

Formally called the Pacific Rim International Conference on Disabilities, Pacrim is one of the world's top rated international educational offerings. The 2013 Call for Proposals will be open from August 1, 2012 through December 14, 2012. To learn more visit: www.pacrim.hawaii.edu, email: prinfo@hawaii.edu or call (808)956-7539

Artificial Vision Update

by Dr.Philip Hessburg, Detroit Institute of Ophthalmology

"Recently we concluded The Eye and The Chip World Research Congress on Artificial Vision. It is the panelists at that congress who will one day create devices which will afford people with severe age related macular degeneration improvement in visual acuity.

There were representatives from programs in at least eleven countries at the congress, and it is important for AMD patients to know that although the devices now under study do offer some improvement in vision to people who are totally blind, there is not yet a device available to allow persons with macular degeneration keen vision. I believe that as nano-electronics becomes increasingly sophisticated, and as we more precisely understand the neuro-biology of the eye and the brain, devices which will be helpful to AMD patients will be developed.

The Detroit Institute of Ophthalmology is putting together a website which will track developments in this area. That website, www.dioworldcongresses.org, is being designed to present human test data as it is put forth by the various groups studying this matter.

Although there is not a device available at this time to solve this problem, I do believe that such a device will be forthcoming, and my guess would be that we will have such sophisticated devices within the next decade."

The 'Eye-Health Diet'

Optometry Today

To maintain a 'healthy eye,' researchers advise that people should try to eat five portions of fruits and vegetables a day, and maintain a low-fat diet.

A diet high in fat and cholesterol can lead to a build-up of fatty deposits in the blood vessels under the macula, increasing the risk for age-related macular degeneration (AMD).

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 Letter From The Editor, Liz Trauernicht

Holiday Gifts: What to Buy for the Person Who Seems to Have Everything!

If you are shopping for a loved one with a low vision problem, please consider getting them the lighting they need to make a difference in his or her everyday life.

The most common question folks ask is, "where can I get lighting that is easy to use and effective?"

Berryessa Designs worked with Low Vision groups for two years to develop such a product.

The floor lamp has a flexible arm that allows the user to place this incredibly bright light right on to the reading material or any other task. The light has a built in fan to prevent heat and has a 14 year life! It is lightweight and blends into any décor.

If you are THE low vision patient and you are plagued with questions about your holiday wish list – this is the perfect request.

Call Mike Ju at 408-657-9229 for more information.

Choosing a Vitamin Supplement

From an article by Stephanie Montgomery OD and Joseph Fontenot MD

With so many supplements available for macular degeneration, how do you decided which supplement is right for you.

Most AMD supplements contain carotenoids (lutein and zeaxanthin), anti-oxidants (zinc and vitamins A,C,and E), and some may contain Omega 3's (EPA and DHA). Carotenoids protect the macula from UV light, oxidative damage and can provide improved contrast sensitivity, minimize glare sensitivity, and small improvements in visual acuity (1 line). Zinc has been shown to decrease the progression of AMD.

However, it is important to realize that supplementation does not provide visual restoration (will not cure AMD), but can help slow disease progression and aid overall visual function.

In addition, correct supplementation is determined by your stage of macular degeneration and your overall health. It is always best to contact your health care provider before choosing a supplement, especially if you have liver or renal disease, are taking prescription blood-thinners, or if you have a history of alcohol abuse or smoking.

If supplementation is not possible or contraindicated, remember that all of these vitamins and minerals are in a normal diet. In particular, zeaxanthin and lutein are in green leafy vegetables (such as spinach and kale). These foods should be made a part of your daily diet.

Research continues. AREDS 2 is an ongoing study assessing the effects of nutritional supplementation on AMD disease progression. This study should provide us with better information about the individual components of vitamin supplementation

For more information on vitamin supplements for AMD, call 800-924-4393 see **optogon.com**

Relaxing Sounds

American Academy of Ophthalmology

For the first time, a study has shown that a sound therapy called binaural beats can calm and relax patients during cataract surgery.

This therapy, combined with soothing music and nature sounds, significantly lowered the patients' anxiety, heart rate and blood pressure.

Click here to download and play a sample MP3 File