



THE MAGNIFIER

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

FREE MATTER FOR THE BLIND

Macular
Degeneration
Foundation

The Magnifier



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STEM CELL NEWS FROM UCLA

CBS News recently reported on promising research by Dr. Schwartz, a UCLA eye surgeon, who has modified human embryonic stem cells and injected them into a 51-year-old woman who is legally blind from a juvenile form of macular degeneration.

Dr. Schwartz said, "We've got some real evidence that we can hang our hat on that there's at least a biological signal that we may be on the right track". The patient described seeing things much better in the treated eye. Dr. Schwartz emphasizes these are preliminary results and is continuing his trial with more patients.

Links:

- * **Additional Trial Information**
- * **CBS News Report**

2012 Meeting Information

Detroit Institute of Ophthalmology Meeting
Sept 9th – 11th

Envision Low Vision Conference
Sept 12th - 15th
St. Louis MO

American Academy of Optometry Meeting
Oct 24th – 27th
Phoenix AZ

American Academy of Ophthalmology Meeting
Nov 10th – 13th
Chicago IL

Buyer Beware

Dr. Joe Fontenot, Dir of Community Services for Low Vision

"Caveat Emptor" applies today more than it did in Roman times. Be cautious and realistic, and do not spend all your money on one overpriced device. Almost all visually impaired people need several devices, depending on what they are trying to do. It is like needing a hammer, screwdriver, pliers and such in your tool box, each for a specific task. The best ways to avoid buying something that is not helpful, inappropriate for you, or is overpriced is to:

- Buy from a local clinic or low vision center with whom you are familiar
- Try it out first. If uncertain on first trying it out, ask if can be tried out at home for a week or two

- Do comparative shopping, as with anything else
- If buying sight unseen, do so only with a free 30-day trial guarantee.
- There is no one aid or device or pair of glasses (no matter how expensive) that will do everything that you want to do. Be wary of claims that one device will do everything.
- If an advertisement offers a "free telephone consultation", this may be to see if you have financial resources and are desperate enough to part with your money
- The same applies to paying money "up front" based on a promise that something will give you a miraculous result.

Clinical Trial Information

Call the National Eye Institute at:

800-411-1222 or
301-496-5248

www.nei.nih.gov

An Update on Blue Light Filtering

James A. Davison, Anil S. Patel, Joao P Cunha,
Jim Schwiegerling & Orkun Muftuoglu

Recent reviews of blue **light-filtering intraocular lenses** (IOLs) have stated their potential risks for scotopic vision and circadian photoentrainment. Some authors have challenged the rationale for retinal photoprotection that these IOLs might provide.

This article evaluates the currently available published papers assessing the potential risks and benefits of blue light-filtering IOLs. It summarizes the results of seven clinical and two computational studies on photoreception, and several studies related to retinal photoprotection, all of which were not available in the previous reviews.

Most clinical studies comparing IOLs with and without the blue light-filtering feature have found no difference in clinical performance for; visual acuity, contrast sen-

sitivity, color vision, or glare. For blue light-filtering IOLs, three comparative clinical studies have shown improved contrast sensitivity and glare reduction; but one study, while it showed satisfactory overall color perception, demonstrated some compromise in mesopic comparative blue color discrimination.

Comparative results of two recent clinical studies have also shown improved performance for simulated driving under glare conditions and reduced glare disability, better heterochromatic contrast threshold, and faster recovery from photostress for blue light-filtering IOLs. Two computational and five clinical studies found no difference in performance between IOLs with or without blue light-filtration for scotopic vision performance and photo entrainment of the circadian rhythm. The

rationale for protection of the pseudophakic retina against phototoxicity is discussed with supporting results of the most recent computational, in-vitro, animal, clinical, and epidemiological investigations.

This analysis provides an updated clinical perspective which suggests the selection of blue light-filtering IOLs for patients of any age, but especially for pediatric and presbyopic lens exchange patients with a longer pseudophakic life. Without clinically substantiated potential risks, these patients should experience the benefit of overall better quality of vision, reduced glare disability at least in some conditions, and better protection against retinal phototoxicity and its associated potential risk for AMD.

Electronic Bifocals A Report from the Consumer Electronics Show



As reported by High Mobley, "I was blown away by Pixel Optics' empower eyeglasses-and I don't even need eyeglasses. If you've ever tried bifocal eyeglasses, you know that the constant distortion at the bottom of the lenses is quite annoying.

The empower eyeglasses give you an on-off switch for your bifocals. They are normal, single-lens eyeglasses, until you turn on the embedded electronics in the temples of the glasses. A bifocal area then is activated, and you have your reading prescription enabled. That's cool enough, but the empower eyeglasses also have an auto-sensing mode that you enable with a swipe of your finger, where the bifocal areas are

activated automatically when you tilt your head down 15 degrees or more. When you look back up, the bifocal areas disappear, and you have your normal eyeglasses with no distortion."

More Information:
pixeloptics.com

Resource Consultant

For assistance identifying agencies in a specific area, call Lee Boncher, Resource Consultant toll free at:

1-888-866-6148

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 or
301-496-5248
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

Macular Degeneration Partnership
888-430-9898
amd.org

Prevent Blindness America
800-331-2020
preventblindness.org

Macula Research Foundation
610-668-6705
mrvf.org

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 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

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").



Food and Eye Health

EGGS

healthdiaries.com

Eggs are an excellent source of lutein and lutein deficiency is common in age-related eye diseases. Therefore, along with preventing AMD they are also believed to help reduce the risk of cataracts.

A study by the Harvard School of Public Health has concluded that there is no significant link between egg and heart disease. According to other studies, moderate consumption of eggs does not have a negative impact on cholesterol. Egg yolk contains choline that helps regulate the

brain, nervous system and cardiovascular system. Eggs are a good natural source of vitamin D. Eggs contain high quality protein and 9 essential amino acids.

GRAPES

A recent report from Silvia Finemann, the principal investigator from Fordham University in New York, stated that grapes proved to offer dramatic protection against age-related eye diseases.

"The protective effect of the grapes in this study was remarkable, offering a benefit for vision at old age even if grapes were

consumed only at young age. A life-long diet enriched in natural antioxidants, such as those in grapes, appears to be directly beneficial for RPE and retinal health and function," she said.

This study also showed that adding grapes to the diet prevented blindness in mice by significantly decreasing the build-up of lipofuscin and preventing the oxidative damage to the RPE, thus ensuring optimal functioning of this critical part of the retina.



Choosing the Right Sunglasses

Optogon.com 1-800-924-4393

Sunglasses are worn for a variety of reasons. For those with eye disease, they are especially important.

Sunglasses may:

- Protect from harmful ultraviolet (UV) light and excessive blue light
- Protect from damage by flying objects, sand, dirt and other debris. Anyone with diminished vision is more likely than those with normal vision to suffer eye trauma from flying objects.

• Diminish glare and improve contrast, enabling you to see better and with less strain or discomfort.

• For fashion or to hide your eyes.

What style and lens are best? Wrap-around glasses that do not let light come in from the sides, top and bottom offer better protection, both from light and flying objects. How can you make sure your sunglasses provide UV protection? Many (not all) optical shops can

test your glasses quickly and accurately with a "UV meter". This service is usually free. Before doing this, you should call and find out if the service is available and is free.

Indoor, anti-glare glasses are also available for extra protection against UV rays from windows, computers, and TV. They also become a first line of defense from various airborne risk factors.

Caring For the Visually Impaired

A handbook of resources for the informal caregiver

Compiled by MD Support, this resource is intended to assist those who are unselfishly committed to caring for visually impaired individuals. We hope the information gathered here will be of value to those special caregivers as they share the challenges confronting their loved

ones and friends. Our thanks goes to all of those organizations and individuals who have made these resources available.

For your copy call Dan Roberts at 816-761-7080. If you would like to view the booklet ahead of time, it is online at:

<http://www.mdsupport.org/library/caring.html>

Limit Sugar Intake and Lower Your Risk!

Tufts University recently published an article regarding a dramatic correlation between a diet high in sugar and early signs of age-related retinal diseases.

Dr. K.A. Weikel states, "For overall good nutrition, as well as ocular health, limiting the amount of sugar in the diet can make a huge impact."

Self-Help Guide

A free guide is available from MD Support that features a self evaluation of 21 personal daily living activities.

It is available for download at www.mdsupport.org/guide.pdf

“DON’T GIVE UP”

Quotations by Andrew Lock

After Fred Astaire’s first screen test, the memo from the testing director of MGM, dated 1933, read, “Can’t sing, Slightly bald, Can dance a little.” Astaire kept that memo over the fireplace in his Beverly Hills home!

Decca Records turned down a recording contract with The Beatles with this fascinating evaluation: “We don’t like their sound. Guitar groups are on their way out.”

Reg Dwight auditioned a singer in the 1960s. He unceremoniously shoved the singer out of his office for wasting his time. That singer is now better known as Elton John.

A Letter From The Editor, Liz Trauernicht



“Don’t Give Up!”

Kate Jones, 25, has not let her Stargardt’s disease deter her ambition as a competitive athlete in rowing. Stargardt’s disease is a genetic macular degeneration condition affecting central vision loss. Even though her training was affected, Kate’s determination prevailed. She found she was eligible for Paralympic competition and is now racing 100% towards London 2012. Kate has only weeks left to make that seat hers and allow all her friends and family to watch her in action on the international stage.

Another SHOUT OUT to Jenny Naso a 100-year old grandmother from Ohio who, despite losing much of her sight because of macular degeneration, crochets blankets for newborns and scarves for soldiers. At age 80 Jenny’s Dr. recommended she start “slowing down”. She disagreed with him and in no uncertain terms! Twenty years later, Jenny is still helping others in her community. She has found ways to continue her craft even with her vision loss. She loves gardening, socializing, and finding new ways to make a difference!

Now we go all the way to Australia to a Printmaker, Tate Adams, still working at 90. As reported by Bronwyn Watson, “Tate Adams is celebrating his 90th birthday and each day he works in his studio he swears he has created his last print because he is

slowly going blind.” He could have given up a long time ago; however he continued day by day to deal with the challenges and continued to create the highly detailed wood engravings that made his reputation. He will never give up!

Conclusion!

Transitioning to low vision successfully has everything to do with patience and the ability to use your strengths to limit your biggest enemy FRUSTRATION. Learning to use your remaining vision and contrast vision is essential to the success of using any number of magnification aides. There are many new products on the market; however, patients tend to be technologically impaired and want to stay that way. Make choices that will help you on the path of empowerment.

The “Big Deal” About Light

by John Nemec - Berryessa Designs

Our lives are intimately connected to light; without light we could not see. There are many sources of light: the sun, a campfire, an LED (Light Emitting Diode), a CFL, Halogen, and others. These sources can be beneficial, harmful, make reading comfortable, hurt our eyes, or even help those with vision problems. We are fortunate that with the choice of many sources, we can fashion a source that can be optimum for some specific purpose.

LED light sources are made from diodes – devices that pass electric current in only one direction and have the capability to emit light when electric current flows through them. The light emitted from these diodes can vary greatly, but for illumination the usual CCT range is 2600K to 6000K. Packaged LEDs can be manufactured for a specific CCT within a specified tolerance. Therefore all LEDs are not the same. This feature of the LED opens the door to designing lamps that can be tailored



to the needs of people with Macular Degeneration. Each person is different and has a pleasing reading experience with a lamp with a certain CCT and brightness – a feature not possible in other light sources.

Berryessa Designs
408-657-9229

A Year’s Worth of Sales in 1 Month

Unbelievably, Regeneron’s Eylea boasted sales of about \$24 million in a short time after being FDA approved in November. There are three possible reasons for the popularity of this new drug:

#1. Regeneron priced the drug lower than the currently approved injection. #2. Eylea is designed specifically to address bleeding for patients that are not responding to the current compounds. #3. Eylea (after the first 3 injections) is effective longer so patients can go from 6-8 weeks between injections.

GENENTECH ANNOUNCES IMPLANTABLE DRUG DELIVERY SYSTEM

Genentech announced recently it will make its first milestone payment to ForSight VISION4, Inc. as part of an exclusive license agreement to develop the company’s investigational drug delivery device, designed to provide sustained delivery of Lucentis® (ranibizumab).

The company has submitted an application for clinical testing of the implantable ocular device in combination with Lucentis.

If approved, this would offer the patient an alternative to the traditional monthly injections.