# second chance 1 at SI 8 Macular

degeneration, a leading cause of blindness, has long been considered incurable. But a promising drug-free therapy is allowing people to see again.

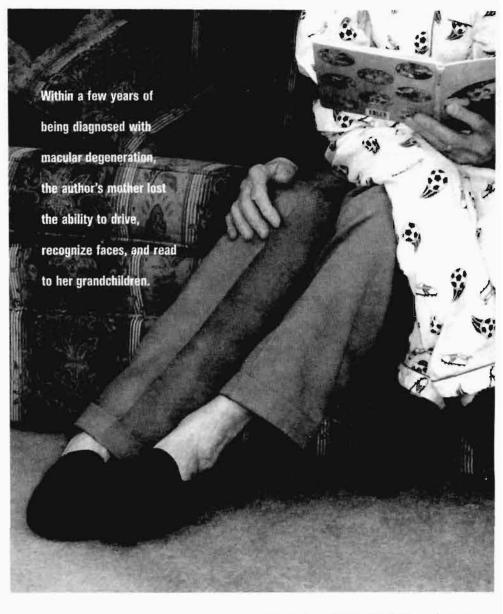
ive years ago, shortly after her 70th birthday, my mother, Elinor Waters, was given some disturbing news: She had an aggressive form of age-related macular degeneration, a progressive eye disease, and would likely lose much of her vision. Macular degeneration is the leading cause of poor vision and blindness among older people, and there are no good treatments. Some 12 million Americans have this condition, and just over one million of them, including my mother, have the socalled "wet" form that's the faster acting and most damaging.

After getting this unsettling prognosis, Moni, a retired university professor, searched for treatments. She did research and met with specialists at prestigious eye clinics in Philadelphia, Baltimore, and Washington, D.C., where she lives. She took part in a trial of one high-tech procedure, but later learned she had been in the placebo group. She had several laser treatments designed to reduce the flow of excess blood to her retina, but with little effect.

For five years, my mother rode a roller coaster of emotions, coping with frustration and depression that grew as her vision and sense of independence faded. She lost the ability to drive, along with most of her central vision. She could no longer read books to her grandchildren or make out the faces of the people she loved.

The ophthalmologists and retinologists she spoke with were discouraging. Until some new drug or procedure came along, they told her, there was little they could do. Most dismissed vitamins or nutrition as a potential help. (Until three years ago, that is, when a large government-funded study confirmed that macular degeneration patients who took antioxidants plus zinc had a better chance of maintaining their

My mother rode a roller coaster of emotions, coping with frustration and depression that grew as her vision and independence faded.



eyesight.) And none mentioned an alternative therapy that a handful of practitioners and their patients consider the first real breakthrough in treating macular degeneration.

The treatment is called microcurrent stimulation (MCS), and it uses low-current electrical energy to stimulate potential healing processes in the retina. Strange as it sounds (considering the seriousness of the disease), this is a do-it-yourself therapy: For \$1,000 to \$1,500, patients buy a microcurrent device, along with other supplies and materials, and learn how to zap their own eyes twice a day.

For more than 20 years, practitioners have championed the use of this treatment as an effective way to slow and reverse vision loss from retinal disease. They claim to have helped thousands of people regain their vision with a therapy

that even skeptics agree poses minimal risk. And they have authored studies in alternative medicine publications that claim success rates of 66 percent and higher.

One satisfied customer is Ed Aleksandrovich, founder

and president of the Macular Degeneration Foundation. In 1997, Aleksandrovich overcame his skepticism and became California physician Damon P. Miller's first MCS patient. Miller, a UCLA-trained radiologist turned alternative practitioner, measured Aleksandrovich's vision as 20/400, then gave him two treatments sandwiched around a dinner break. Alexandrovich's vision promptly improved to 20/125. A few days later, he noticed that for the first time in years he could see the crossing signals near his home and the numbers on his microwave oven. "Only a minority of people have that kind of early rapid change," Miller cautions. "But it

does happen occasionally." More typical is the experience of Ed Loughran, a retired Air Force general who lives near Sacramento, California. Before he began treatment in early 2001, Loughran's vision had declined to 20/80, and he didn't feel comfortable driving. After using microcurrent stimulation and taking nutritional supplements for six months or so, he began to notice small improvements, and after a year of daily treatments he was able to drive

again. Today, three years after he started, his vision is 20/30. "I think this treatment is dynamite," he says.

#### CELLULAR ACTION

Microcurrent stimulation has been around in various guises for several decades. In the mid-1960s, two researchers, Ronald Melzack and Patrick Wall, suggested that nerves in the spinal column could be electrically sumulated to close like gates, blocking the transmission of pain signals. This led to the development of the first generation of transcutaneous electrical nerve stimulation (TENS) devices, which are now widely used for pain relief.

Other researchers discovered that electrical stimulation increases blood flow, eases circulation problems, and promotes the healing of leg ulcers. But perhaps the most important finding along these lines was made in 1982 by Belgian researcher Ngok Cheng. He and his colleagues found that electrically stimulating rat skin triggered a 300 to 500 percent increase in ATP, the protein that is a principal source of energy in cells. This increased output of ATP is what microcurrent practitioners believe to be the critical healing mechanism of microcurrent stimulation.

"[Cheng's] study is exciting because it gives us a model for how MCS might work inside the eye," wrote Edward Kondrot, a Pittsburgh ophthalmologist, homeopath, and microcurrent practitioner, in an article published in the October



### visual healing

The Grace Halloran Approach

Over the past 30 years, alternative practitioner Grace Halloran has become recognized as a leader in treating retinal disease. Microcurrent stimulation is the cornerstone of her therapy, which also includes other techniques. Here are the six key elements, developed with her collaborator, physician Damon P. Miller II:

- 1 Microcurrent stimulation Use low-current electricity, which passes through electrodes connected to an eye patch placed over both eyes; treat eyes two to three times a day for 5 to 10 minutes, five days a week.
- 2 Color therapy Look at colored lenses lit by a lamp (cost: \$300). The process is thought to enhance the visual pathways that process light and color.
- 3 Acupressure Press on acupressure points around the orbit of the eye and elsewhere on the body, while looking at the color lamp (see #2).
- 4 Nutritional supplements Take lutein, taurine, and omega-3s to repair eyes, and B vitamins, minerals, and digestive enzymes for overall health.
- 5 Exercises Perform specialized movements to improve blood supply to the head and eyes, such as yoga-like stretching movements of the neck and torso.
- 6 Stress management Practice deep breathing or meditation to help reduce stress. Chronic stress can inhibit the supply of blood to the head, thereby contributing to retinal damage. -R.W.

2002 Townsend Letter, an alternative health publication. "The MCS applied to the eye will stimulate the diseased retinal cells, increasing cellular functions and stimulating the diseased cells to recover."

While my mother has the wet form of macular degener-

ation, the more common and less severe dry form occurs when small yellow deposits accumulate under the macula, the central area of the retina. Over time, the macula thins and dries out, causing blind spots. The patients who progress to the wet form also sprout new blood vessels under the macula, which can leak blood or fluid. This pushes up the macula and distorts or destroys central (as opposed to peripheral) vision. By increasing ATP production, microcurrent devices may give damaged and dysfunctional retinal cells the boost they need to heal.

Although microcurrent stimulation devices are widely used and FDA-approved for treating pain, they aren't specifically approved for treating vision problems. This means that doctors are free to suggest the technology to patients with macular degeneration; they just can't advertise its potential for treating the disease.

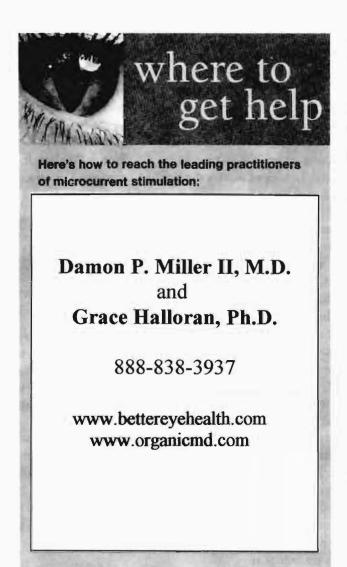
And many ophthalmologists wouldn't think of it. In spite of the enthusiasm for MCS, it's not even close to being accepted by mainstream medicine. In 2000, a task force of the American Academy of Ophthalmology (AAO) reported that

"strong scientific evidence has not been found to demonstrate the effectiveness of microcurrent stimulation" for macular degeneration and called for long-term controlled studies. In an interview, an AAO representative, Cleveland retinologist Lawrence Singerman, expressed skepticism. "If there were really enough promise in this technique," he said, "there would be investors stepping up to fund such a study."

Sometimes, says alternative practitioner Grace Halloran, the so-called godmother of MCS, "I feel like Donna Quixote tilting at windmills."

#### AMAZING GRACE

Still, for many people like my mother, MCS represents the last, best hope of retaining their sight. Last September, after the Washington Post published an article she wrote about coping with vision loss, she got a call from a local dentist who said his mother had been treated with microcurrent stimulation. She, too, had been told that nothing could restore her



eyesight but had recovered significant vision.

Mom spoke to the woman, who told her that after several months of using an MCS device daily, she had regained enough eyesight to read printed words and the clock by her bed. Mom borrowed a book by Kondrot about the treatment with the attentiongrabbing title Microcurrent Stimulation: Miracle Eye Cure? Then she made a call to Damon Miller. who wrote the foreword to Kondrot's book.

Miller, his business partner Grace Halloran, and Kondrot are probably the leading proponents of using MCS to treat vision problems. Between the three of them, they say, they've trained 3,000 people to treat themselves, and they claim that their protocols, which differ slightly but include spe-

cial nutrition, vitamins, and other elements, have brought about improved vision in some 70 percent of patients.

Soon after my mother spoke to Miller, she and my father got on a plane to California. We all met with him at his office near San Jose, where he tested my mother's vision and told us how this whole thing got started.

In 1971, at the age of 24, Grace Halloran was diagnosed with macular degeration and retinitis pigmentosa (RP), the name given to a group of genetic eye diseases that cause progressive degeneration of the retina. Halloran's mother also has the disease, and her grandmother, great grandmother, and great-aunt all suffered from blindness. Halloran accepted the grim prognosis that she would likely go blind, too. But when her son was born a few months later, and a doctor predicted the same fate for him, she decided to fight back.

Halloran was living in the San Francisco Bay Area, the nerve center of the growing holistic health movement, and from 1972 to 1979 she immersed herself in different ap-

continued on page 116

continued from page 70

proaches to healing the eyes and the body. She enrolled in a Ph.D. program in holistic health at Columbia Pacific University in Marin County (shut down by state regulators in 2000) and interned at a holistic health institute. Using a combination of nutrition, Oriental medicine, acupressure, acupuncture, and herbal medicine, she began experimenting on her own family.

"Because everyone in my family has RP, I had a built-in laboratory of guinea pigs at my disposal," she says with a laugh. "I literally worked on my son in the crib, doing acupressure and reflex points."

During this time, Halloran found an only-in-California job as the alternative healer for the Sonoma State University

football team. She convinced a wealthy client whose son was on the team to buy a \$5,000 microcurrent device called an electro-acuscope, which had shown promise in speeding the healing of fractures and soft tissue injuries and is used by professional sports teams, including the San Francisco 49ers.

The day before his eighth birthday, her son severely fractured and dislocated his elbow. An orthopedist pre-



Grace Halloran has trained hundreds of patients to use microcurrent stimulation.

dicted his arm would suffer permanent damage and scheduled surgery for the next day. Halloran brought the electro-acuscope to his hospital room and began applying it to his elbow. Overnight, the swelling shrank from the size of a softball to nearly normal, she says. The amazed orthopedist canceled the surgery, saying it was no longer needed.

"It was phenomenal," Halloran says. "And I began to wonder: What would it do for my eyes?"

Although Halloran's experiments with various therapies had improved her daytime vision, she still could see nothing at night. She turned the electro-acuscope on herself, applying its microcurrents to the acupressure points around her eyes. "After I experimented on myself," she says, "I tried it on my mom and other people, and we all noticed that our night vision improved dramatically." An optometrist measured her eyesight and confirmed her discovery.

She began treating people with retinal disease with great success, she says, and eventually realized she needed to document her results. She conducted a trial of 114 patients, using local optometrists to measure the patients' eyesight before and after three weeks of treatment.

The results were striking: Ninety-eight of her patients showed significant improvement, she says, and were able to

read at least two additional lines or better on eye charts. She submitted the results to several medical journals, but was turned down since the study had no control group and no ophthalmologists were involved. Researchers in other countries were interested, however, so Halloran began traveling to Europe and South America, and lecturing on her work.

She stopped touring, however, after she was exposed to radiation from the explosion of the Chernobyl reactor on a flight to Sweden in 1986. For the next several years, she suffered from radiation sickness, including thyroid disease and high blood pressure. By 1993, she was nearly blind. It took another two years for her health to improve—though her vision stayed the same—and she returned to her research, committed to doing a more scientifically rigorous study.

This time, she borrowed an electro-acuscope and recruited

## Halloran's son, Kevin, who doctors predicted would be blind by his teens, is 32 and has no vision problems.

a San Francisco ophthalmologist, August Reader, to help conduct clinical trials. She treated 30 patients with a combination of MCS, nutrition, color therapy, acupressure, and acupuncture. The results were just as impressive as before: Reader evaluated the patients before and after the treatments and found marked improvement among the treated patients, but none in a small group of untreated control patients.

Halloran and Reader published their results in the *Townsend Letter*, but once again the work went unnoticed by mainstream ophthalmologists and an application for research funding was turned down. "We couldn't get it in a peer-reviewed journal," Halloran says. "My life was consumed with writing grant proposals and doing research, but we never got anywhere."

Well, not exactly. Halloran has worked with hundreds of patients and has inspired disciples who have treated thousands more. She continues to train patients at her current home base in Las Vegas and elsewhere, and collaborates with Damon Miller.

Sadly, she has been unable to save her own sight in spite of resuming treatment in 1995 after recovering from years of ill health. Her vision improved substantially, only to decline again in 2001 when her blood pressure problems intensified. Today, she is legally blind with virtually no central vision.

"I'm no longer the poster girl for MCS," she says, "but I'm the coach and teacher, and I still do research and love being able to help others." She also loves telling her son's story. Kevin, who doctors predicted would be blind by the time he reached his teens, is now 32, and has had no problems with his vision, despite the spots on his retina that are the hallmarks of retinitis pigmentosa.

Halloran remains disappointed that her treatments haven't been validated by mainstream researchers. Indeed, most mainstream ophthalmologists are openly skeptical. "Miracle eye cure, my foot," one of my mother's ophthalmologists told her when she attempted—unsuccessfully—to discuss Edward Kondrot's book with him.

Meanwhile, practitioners like Miller are in a bind: They can treat patients off-label legally but can't officially do research without FDA approval of a study protocol. Joel Rossen, the owner and developer of a leading line of microcurrent devices known as MicroStim, says he has submitted a study protocol to the FDA but the agency has been slow to act. If and when it does, Rossen says, he would need to raise nearly \$1 million to fund the study.

If the funding ever comes, August Reader, the San Francisco ophthalmologist, says he would love to help conduct the trials. He continues to believe that MCS is a useful therapy and is eager to test it in a scientific way. "I know it works and that it doesn't hurt anything," he says.

As for my mother, she decided to give MCS a try and at press time, had been using the Halloran-Miller treatment protocol for one month. She hasn't seen any improvement yet, but she's committed to trying it for one year. "After all," she says, "what have I got to lose?" \(\Omega\)

Berkeley, Calif.-based writer **Rob Waters** is coauthor of From Boys to Men: A Woman's Guide to the Health of Husbands, Partners, Sons, Fathers, and Brothers, which will be available in April.

## where to get help

Here's how to reach the leading practitioners of programs including microcurrent stimulation for the treatment of eye disease:

Damon P. Miller II, M.D., N.D. and Grace Halloran, Ph.D.

888-838-3937

www.bettereyehealth.com www.organicmd.com

You can learn the six elements of the Integrate Visual Helaing program by attending one of our two day seminars. If you would prefer not to travel, there is an option for a home treatment program. Call to see which is best for you.