StrokeNet

http://www.strokenetwork.org/ July 2003

Welcome to the July issue of StrokeNet. In this issue we are pleased to introduce Joe Flasher as a new regular contributor. Joe is both a stroke survivor and a pharmacist.

Steve Mallory includes his monthly organization report. David Ray continues the story he began last month sharing his trip up the west coast of New Zealand. Dr Ted Cole of the Cole Center for Healing in Cincinnati, OH writes about Antioxidant Therapy and Stroke.

Joe Flasher contributes an article on statin drugs. This is the first of several articles Joe plans to write on drugs often taken by stroke survivors. Cleo Hutton shares ideas to help stroke survivors drive again. The website of Rehabilitation Institute of Chicago's Life Center is reviewed. Bios are of Stacy Fritz and Doug Macpherson.

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Organization Highlights

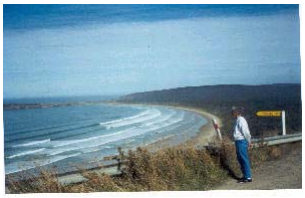
By Steve Mallory

This past month was pretty much wasted for me primarily due to the same reasons that I reported last month. My health is holding me back from the things that I want to be doing for the organization. I am happy to report that I began taking the prescription drug, Bextra, for the neck problem that I told you about, and it is fantastic for me, but my stomach is still giving me fits. The combination of stomach trouble and chronic fatigue are driving me crazy!

I had really wanted to start a daily chat group but I have not felt up to it. I know that many of you emailed me and were interested in the chat. I feel bad about not holding it but I was only trying to organize it. I do not need to be there if you want to meet. I have noticed that people are coming to the chat room throughout the day but are leaving the room after only a few minutes. If you can stay in the room longer you possibly will meet others when they arrive.

The other important thing that I wanted to touch on is registration activation. We still have over 200 members who have not activated their registration. You have to activate yourself. The welcome email that you received after registration has an activation link in it that you need to click in order to be activated and then be able to access our stroke support groups. If you use AOL you might not be able to click the link so just copy the URL and paste it into your browser. If you are still experiencing access problems please email me at Smallory@strokenet.biz.

Steve Mallory
President & CEO



Life in New Zealand with a Stroke

By David G. Ray

We are now heading towards winter but at present no one seems to have told the almighty. I have even seen the odd but brave or foolhardy person swimming. Admittedly the sponsored midwinter swimmers have been braving the harbour. Our stroke club members are not so foolhardy and have had a more serious theme. At the end of May a Physiotherapist talked to us about keeping our limbs exercised even those who are restricted to a wheelchair. This talk covered advances in physiotherapy and introduced our members to various exercises. She also answered a lot of questions. In early June we had a very interesting talk from the National Institute of Weather and Atmosphere. This was a most informative talk, illustrated with slides taken in space covering aspects of the atmosphere, which affect the weather in New Zealand and around the Pacific region.

The weather my wife and I experienced on our drive to Invercargill and up the West Coast of New Zealand could not have been better. Last month I wrote about our journey from Wellington, across Cook Strait to the South Island City of Timaru, where I was born. About 84 kilometres south of Timaru is the North Otago town of Oamaru. Many buildings in Oamaru and in other parts of the

South Inland are built of decorative, easily mined material called Oamaru Stone. There is also a group of individuals who most weekends ride around on Penny-Farthing Bicycles. But must of all Oamaru has a thriving colony of blue penguins. (www.penguins.co.nz) Every evening the penguins come out of the sea to feed their chicks, spend the night, and return to the sea in the early morning. There is also a much larger colony on Philip Island neat Melbourne, Australia

From Oamaru we drove on to Dunedin City well known for its Scotish influence. One of the many websites for Dunedin is www.visit-dunedin.co.nz. A few kilometres south of Oamaru are a formation of rounded rocks known as the Moraki Boulders. We stopped here for a cup of coffee and a look around. These rounded boulders are strewn throughout this section of the beach and attract many visitors. Having been to Dunedin many times before we passed through and drove on to Balclutha. Balclutha is situated on the Clutha River, which handles the greatest volume of water of all New Zealand rivers. This river has some of the largest electric power generators in New Zealand.

From Balclutha we turned off State Highway No 1 to drive along the Catlins scenic road to Invercargill (www.catlins.org.nz). There are many scenic and nature trails on this route with many waterfalls and sea views to be seen. Many of these trails are not very accessible for stroke victims. There are many coastal views however and the photo above I took of my wife Enid overlooking one of those views.

Leaving the Catlins area we arrived in Invercargill, (www.invercargill.org.nz) the southernmost city in New Zealand. This city is known among other things for the wonderful oysters which are fished from the port of Bluff (www.bluff.co.nz). We had come to Invercargill to attend our niece's wedding and I will describe this in my August newsletter.

ANTIOXIDANT THERAPY AND STROKE

By Dr Ted Cole

Medical Director Note: The above article and the ideas are theory and not evidence-based. We are presenting this information for interest, not necessarily are we recommending this form of treatment. See our medical disclaimer, which is located at http://www.strokenetwork.net/policy/disclaimer.htm.

A stroke produces a great deal of cellular damage, which in turn produces a huge amount of free radical stress. Free radicals are compounds formed by the body that are toxic. Ordinarily, the body's natural mechanisms are able to handle this stress with other agents that neutralize the free radicals and make them harmless. However, in any significant injury (stroke, brain damage, lack of oxygen, etc), the body's natural systems become overwhelmed and require support. As an adjunct therapy to Hyperbaric Oxygen, we have developed an intravenous treatment using two of the most potent antioxidants available, Glutathione (GSH) and alpha-lipoic acid (DHLA). We have two types: a simple IV using only a few nutrients with GSH and DHLA, and a complex IV using multiple vitamins and minerals. The latter should be used in any state of extreme stress, or if you have not been on vitamin/mineral supplementation.

GLUTATHIONE (GSH)

There is a direct correlation between levels of GSH and health: decreased levels are associated with poor health, and higher levels with good health. GSH is one of the most important antioxidants. Its highest concentration is in the liver, where it plays a crucial role in detoxification. GSH has one of the highest concentrations of any antioxidants inside the cells. This is critical, as oxidants are the principal contributors to degenerative diseases and the progressive loss of organ function, which we recognize as aging.

GSH plays a role in protein synthesis, enzyme function, membrane transport, receptor action, cell maturation, immune cell growth and function, nervous system function, pancreatic function, and others. These are basic functions affecting all areas of health. Most stressors deplete GSH, including dietary deficiencies, Tylenol, injury, poor circulation, infection, alcohol, strenuous aerobic exercise, illness, ionizing radiation (X-rays, sunlight), and halogenated hydrocarbons (contained in pesticides, dry cleaning solutions, herbicides, and plastics: they are found in the fat tissue of every human alive today).

GSH repletion is essential for recovery. Failure to do so results in degenerative illnesses, including all autoimmune disorders (rheumatoid arthritis, lupus, etc.), nervous system disorders (Parkinson's, tardive dyskinesia, Alzheimer's, ADD/ADHD, schizophrenia, etc), arteriosclerosis, cataracts, pancreatic inflammation, asthma, COPD, and others. GSH is also very effective in removing heavy metals and improving sickle cell disease. In addition, it is extremely helpful in all conditions affecting the liver. In stroke, it not only helps to

decrease free radical levels, it also helps in the repair of the cellular damage and assists in healing.

LIPOIC ACID (DHLA)
DHLA is the only known antioxidant to be both fat and water soluble, giving it some unique abilities. It is considered by many to be the ideal antioxidant. It helps to regenerate other antioxidants, and can help to increase levels of GSH, vitamin C and E, and CoQ10. It also helps to protect DNA, remove heavy metals, protects tissue from damage due to heavy metals and chemicals, improves diabetic neuropathy and other diabetic complications, cataracts, glaucoma, injury due to poor circulation, Alzheimer's, Parkinson's, and most neurological disorders. It therefore has many of the same effects as GSH for stroke, promoting the repair of cellular damage and healing of the brain tissue.

The combination of GSH and DHLA makes for a potent combination capable of improving a wide variety of conditions, making it suitable for everything from cancer to anti-aging. There are no known side effects at therapeutic doses.

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See the May issue of StrokeNet for information on Hyperbaric Oxygen Treatment and Stroke.

Cholesterol Therapy Using The Statin Drugs

By Joe Flasher

It's been suggested that I write a series of articles concentrating on those drugs that we stroke survivor's use most. Such as antihypertensives, anticoagulants, cholesterol lowering agents and so on. I think this approach can be useful since it will be targeted information and not a lot of generalities that may not apply to us strokers. There is just so much information out there that being specific may be helpful.

The first group of drugs we are going to talk about are the cholesterol lowering drugs, concentrating on the "statin" class of drugs. The word "statin" refers to a class of drugs that act in the same way and basically produce similar results. There is many other cholesterol lowering agents which we will mention as we move along. But this is the most widely used and significant class.

I am going to make some assumptions before I begin. Most of us are aware of how cholesterol comes about and drugs are not used until we have tried some lifestyle changes (diet, etc.). We all know LDL and HDL good and bad cholesterol and how they must be controlled in the body. Your liver manufactures about 80% of cholesterol and the other 20% we take in by way of animal fats. This 20% is the cholesterol we're targeting by using drugs.

So let's begin by talking about the "statins." They are also known as Hmg-CoA reductase inhibitors. This is a medical term you can more or less leave behind to keep from muddying up the waters. You have seen the drugs advertised as Lipitor, Pravachol, Lescol, Mevachor, and Zocor. All of the drugs work directly in your liver to block a drug needed by your liver to manufacture cholesterol. That lowers or depletes the cholesterol in your liver cells and causes those cells to look for cholesterol to remove in your circulating blood supply.

Depending on the dose, the statin you use can lower your LDL (Bad) cholesterol about 40%, which normally brings it within normal limits. Statins can also reabsorb cholesterol, which lowers the amounts plugging your blood stream. Statins can also lower inflamed areas around plugged areas in the artery, which can stabilize the plug and reduce your chances of rupture and blockage of the artery.

Statins are the only type of lipid lowering drug proven to reduce your risk of death from cardiovascular disease. Remember not to drink grapefruit juice while taking any of these products as it can increase your risk of side effects.

There are many types of cholesterol lowering drugs available and which one your Doctor chooses depends on many factors such as how much LDL and HDL is in your blood as well as other Lipids (fats) such as triglycerides. Many times a combination of drugs can be more effective.

The side effects of the "statins" are relatively mild. Muscle weakness and pain most especially when they are combined wit other drugs. This is a relatively rare side effect but one that should be reported. More commonly you would expect gas, stomach cramps, diarrhea or constipation as well as others. Please tell your Doctor of anything unusual. The number and severity of side effects and problems vary widely depending on the dose used.

In Summary we should keep in mind what we want to do, and that is, to lower cholesterol and triglycerides to keep from forming clots that can cause heart and stroke risks. All drugs approved by the Food and Drug Administration will work to some degree. The "statins " do the job better and that's what we want. Better is good.

See the USA through my CVA

By Cleo Hutton

It takes brains to drive! We have to be able to react and be aware of traffic, road conditions, road signs and visual scenes coming from our right, left, behind and in front of our vehicle. We have to be able to have depth perception in order to parallel park or know how close objects are to our car. In most states, we have to be able to pass a vision test with or without corrective lens.

We have to be able to make split-second decisions and opt for the safest one. We must be able to follow directions, observe signals, and at the same time use our eyes, ears, hands, and feet simultaneously. We have to be "on alert" at all times and this is very taxing after a stroke.

It takes brain power to do everything. Our brain controls all voluntary and involuntary movements; heartbeat and pulse, breathing, movements of body parts, thinking, reacting, emotions, vision, just to name a few. Our brain is better than any high-tech computer. We are unique! This individuality also includes what part of our brain was affected by stroke, our age, and how we can adapt in learning new ways of operating a motor vehicle safely. After a stroke, our vision may be permanently affected. Our reaction time may be severely hampered and our dexterity in operating a vehicle may be curtailed.

Personally, after two strokes, I waited seven years before I felt able to adapt to my stroke deficits enough to take a drivers assessment test. In this certified program, I was tested through a therapy department first and then given a "behind the wheel" driving analysis. Although I passed the driving assessment program and the state licensing requirements, today, ten years post-stroke, I choose not to drive in heavily congested areas or after dark when my vision may be even more deterred. I choose not to listen to the radio or converse with a passenger while driving as I am required to totally focus on what I am doing. These are personal choices I am willing to make because I am not only responsible for myself and my passengers while driving but accountable to other drivers and pedestrians as well.

After a stroke driving can be extremely difficult as well as hazardous. When you are ready:

- Check with your doctor
- Take a course through The Courage Center Driving Assessment Program
- Check with your local Stroke Support Group for other driving programs that may be available in your area.

Accidents happen, but we can help prevent car accidents by attending an approved Adaptive Driving course. Your insurance company may insist on a re-training program before you get behind the wheel post-stroke. **Driving is a privilege not a right!**

Let's assume you're on the road again.

- Never drive when you are tired.
- Never drive in hazardous weather conditions.
- Never drive for long periods without a break or a second driver

Website Review: Rehabilitation Institute of Chicago's Life Center

The Life Center area of the site of the Rehabilitation Institute of Chicago, http://lifecenter.rehabchicago.org is a collection data and links providing important information to the stroke family

Major categories include:

Medical Information and Care,
Caregiving and Equipment
Housing and Transportation
Education and Employment
Support and Wellness
Recreating and Leisure
Finance and Law
Inspiration and Hope

Each of these categories includes other groups. Finally there is a list of resources such as books, websites, videos, magazines and info sheets. In a few cases the information is included on the website. In most cases you are referred to other data. For example you may be referred to a book, which addresses the issue.

This site is helpful if you are doing research. It may point you toward information you need.

Biography: Stacy Fritz

My professional background includes working as a physical therapist in acute care, rehabilitation, outpatient, and home care settings. Trained at the University of Kentucky as a physical therapist, I began my career as a PT working for Staffing Options and Solutions as a traveling therapist. While practicing, I continually questioned the theory and research underlying many of the interventions we utilize.

These questions directed me toward the literature where my readings peaked my curiosity resulting in further questions and subsequently led me to the University of Florida where I am currently pursuing a doctoral degree in Rehabilitation Science. By studying the science of rehabilitation, I am becoming more skillful in conducting research projects aimed at improving the treatment of individuals with stroke.
During my tenure at the University of Florida, I have been involved in numerous neurologically based research projects, mainly in the area of stroke. I have worked on a series of constraint-induced movement therapy (CIMT) studies designed to improve hand and arm function in stroke survivors.

CIMT is a technique used mainly with the post-stroke population to increase the functional use of the neurologically weaker upper-extremity through training while restraining the lesser-involved upper-extremity. More than half of the 730,000 people a year who suffer from a cerebral vascular accident (CVA) have residual motor disability.[1] However, as the general population continues to age over the next fifty years there are predictions that this number will double.[2] The reduction of CVA related disability is essential because of the number of people who are affected by stroke. Currently, few traditional rehabilitation methods have been proven effective in the treatment of stroke victims.[2]

CIMT significantly improves functional use of the upper extremity in 20-25% of people with chronic stroke. However, the characteristics of this 25% are unknown. As researchers continue investigating this treatment, the link between theory and potential for clinical utilization will merge. There is limited evidence about who benefits most from this intervention. The goal of my research over the next year is to determine the greatest predictive factors of functional improvements following traditional CIMT, in other words, to determine who benefits most from CIMT. My long-term goals are to pursue a career as a researcher, educator, and clinician in an academic setting. Primarily, I am dedicated to the field of physical therapy and promoting patient care through improved scientifically based and clinically relevant physical therapy research and education. The area of research I plan to pursue is therapeutic interventions for neurologically impaired patients.

As a novice researcher, I have had the opportunity to be involved in many ongoing research projects, grant writing, and research training. For example, locomotor training of patients with spinal cord injury, constraint-induced therapy for patients with stroke, and gait initiation studies. These experiences are providing me with a broad base upon which to build a foundation as a researcher in the rehabilitation field. I plan to continue to investigate the scientific basis of therapeutic intervention for people with stroke. Physical therapy is an integral part of health care, and in order for it to survive and prosper, it must be rooted in sound scientifically-based interventions. Therefore, clinically relevant research must progress so that we can improve patient care and enhance rehabilitation science. As a physical therapist first, my goal as a researcher will be to use my doctoral training to ask clinically relevant questions and seek scientifically based answers that are necessary to provide patients with the best possible care.

As an educator I plan to instill in my students a link between the clinical and research world, emphasizing the need for scientifically based treatment and evaluation techniques. Students must learn both the psychomotor aspects of therapeutic interventions and the fundamental theoretical models and basic science mechanisms underlying why we choose to implement different therapeutic interventions. Both of these components are essential for a complete learning experience and a well-rounded physical therapist. As a teaching assistant at the University of Florida, I have taught and assisted teaching in lectures and labs along-side master educators and clinicians. In my doctoral program teaching course, I have learned about teaching styles, alternate methods of engaging a class in discussion, and improved means by which I can utilize assistive and interactive technology to ensure the best possible learning experience for students. I plan to incorporate these teaching methods into my plan for educating future physical therapists.

Finally, because I am a physical therapist, I will always stay active in the clinic through supervising students, working directly with patients, performing in-services for clinicians, or providing specialty clinics. Involvement in the clinic will allow me to conduct clinically based, relevant, quality, scientific research in the area of movement dysfunction with the goal of improving therapeutic intervention for improved recovery of function.

I believe rehabilitation will continue to improve and advance when supported by scientifically based research. As an educator, I plan to instill this philosophy in my students; as a researcher, I plan to pursue this philosophy to progress rehabilitation science. My experience thus far as a teaching assistant, researcher, and clinician, along with my future goals, are evidence of my commitment and intent to contribute to the science and advancement or rehabilitation literature and knowledge.

[1]Stineman, M. G., Maislin, G., Fiedler, R. C., & Granger, C. V. (1997). A prediction model for functional recovery in stroke. Stroke, 28, 550-556.
[2] Taub, E., Uswatte, G., & Pidikiti, R. (1999). Constraint-induced movement therapy: A new family of techniques with broad application to physical rehabilitation - A clinical review. Journal of Rehabilitation and Development, 36, 237-251.

Biography: Doug Macpherson

Dr. Doug Macpherson had his first stroke four years ago when he was 38.

The morning prior to the stroke I had a severe chest pain for 15 to 20 seconds. I did not give much concern, because I ate healthy, walked 5 times a week and lifted weights 3 times a week. The morning after the chest pain, I awoke and proceeded to get ready for work as normal. After breakfast my wife noticed I was highsteping which I had no idea. I turned to talk to my wife and collapsed on the floor. My wife and my neighbor loaded myself in the car and off to the hospital I went, this is when the fun started.

In the emergency room the ER Doc knew something was wrong. He called neuro for a consult. After two hours neuro arrived. By then I was paralyzed on my left side. He acted like he did not believed my wife as she told him the situation. He decided to do a spinal tap. After one and half hours of trying to do a spinal he asked for help, the other Doc did it 2 minutes. On the third day in the hospital a CAT scan and a MRI were ran and they found the clot. Then they ran many tests, with no luck. They ran a fiber optic scope down my nose and went behind my heart no luck, also went to my carotid arteries and found my left side never had an artery. They did not do much more the next 2 days.

I laid in bed and they would give me memory test. That is all they did oh what fun, because my memory was affected and the answers were all wrong. My wife told me later that one of the testers laughed at my weird answers. Upon being released the Doc said good luck we have no idea why you had a stroke. Then he said as he walked away you could have another stroke tomorrow, in a week or month, take care. I went to therapy for 6 months. By looking at me now you could not tell I had a stroke but what was affected was my memory, also a lack of get up and go. Three years later I had another stroke and went to a different hospital. The care was great. Unlike the first hospital, they prescribed blood thinners. Now I am on 6 different meds. I am unable to do my job because my memory is less then normal. So I do work that I can handle. The most important event now is to enjoy my wife and children. I enjoy life like it is my last day on earth. Head up, smile and say I will get though this I am a survivor.

The Stroke Network is a registered 501(3)c non-profit organization. We are an on-line stroke support organization and is available to everyone worldwide. Since 1996 we have provided stroke support and information to nearly 10,000 people and to thousands of visitors to the site. The Stroke Network is the homepage for a network of several other smaller web sites owned by The Stroke Network Inc

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