THE RACE TO ERASE MS

Our mission is to find the cause and ultimate cure for multiple sclerosis by funding scientific research grants through The Nancy Davis Center Without Walls program, a nationwide collaboration of the top seven MS research centers in the United States. We will win the Race to Erase MS!

FALL 2006 Volume 6 / Issue 1

INSIDE The RACE

Contact Us

The RACE to Erase MS,
The Nancy Davis Foundation for Multiple Sclerosis

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Disco Fever to Erase MS

Jason Davis, Sister Sledge, David Foster, Suzanne de Passe, Tom Arnold, Lynn Palmer, Nancy Davis, Tommy Hilfiger, Barbara Davis, Kool & The Gang

It was a celebration and good times to remember as Co-Chairs Nancy Davis and Tommy Hilfiger welcomed special celebrity presenters Ryan Seacrest, Randy Jackson, Anne Heche and Sharon Osbourne to the 13th Annual Race to Erase MS event, themed "Disco Fever to Erase MS", on Friday, May 12th at the Hyatt Regency Century Plaza.

The event raised over 2.5 million dollars for multiple sclerosis research thanks to a most generous group of supporters. Tommy Hilfiger Corporation, American Airlines, Serono and the Hyatt Regency Century Plaza all contributed to the tremendous amount of funds raised to support MS research. Once again supporters from the entertainment and music industry as well as leaders from the world of business and celebrated guests from all over the world were in attendance at this star-studded evening.

The highlight of the evening included an exclusive celebrity fashion show featuring one-of-a-kind disco inspired designs by Tommy Hilfiger. Lisa Rinna took the stage with her dancing partner, Louis van Amstel, from "Dancing with the Stars" and kicked off the evening with a 70's inspired number. Spectacular live performances by musical legends and Grammy Award winning artists Natalie Cole, Macy Gray, Sister Sledge and Kool & The Gang rocked the house and had everyone dancing in the aisles. The show was produced by Suzanne de Passe, with David Foster as the musical director.

Tom Arnold, Byron Allen and Brooke Burns raised much needed funds as celebrity auctioneers at the night's exciting live auction. The high-energy auction featured an extraordinary list of luxury items including a private dance lesson with Drew Lachey and Cheryl Burke from "Dancing

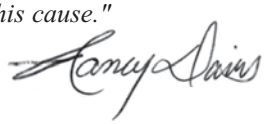
(RACE continued on Page 13)

Message from Nancy Davis
President and Founder

"When I was first diagnosed in 1991, Multiple Sclerosis was a mystery disease that no one truly understood. Doctors were unable to arm me with the information that a newly diagnosed patient needed, or tell me how MS would affect my family and my life.

It's amazing how the landscape has significantly changed over the last fifteen years. At that time there were no drugs on the market to help stop the progression of this disease. Miraculously, there are now six with FDA approval with a seventh very near approval and others coming through the pipeline in the very near future. We are now so much closer to finding a cure. Hopelessness has been replaced by hopefulness.

Through our Center Without Walls program, there are so many more exciting and promising new therapies on the horizon. Our seven centers that make up the prestigious consortium of the Center Without Walls program have made extraordinary breakthroughs in a short amount of time . This expansion of minds working towards a cure gives me confidence that we will win this RACE to Erase MS in the next decade with the diligent work of our Center Without Walls physicians and the continued support of the many generous and caring contributors to this cause."



SYMPTOMS OF MS?

Multiple sclerosis causes a large variety of symptoms. The most common symptoms are:

- **NUMBNESS OR TINGLING**
- **UNUSUAL FATIGUE, WEAKNESS AND EXHAUSTION**
- **VISION PROBLEMS**
- **LOSS OF MEMORY**
- **POOR COORDINATION OR DIFFICULTY WALKING**
- **BLADDER PROBLEMS**
- **SLURRED SPEECH**

No two persons with MS will necessarily display the same symptoms, making it difficult to predict the course of the disease for an individual patient. Symptoms may occur suddenly and remain constant, or may continue in a progressive or episodic pattern. The uncertainty and unpredictability of MS makes living very difficult for the victims, their families and friends.

In loving memory of
one of our beloved
and dedicated
members of our
Board of Directors

Lenny Florence
1932 - 2006

We will always remember his kindness and deep sense of charity and how he always cared so deeply about helping those less fortunate than himself.

Genentech and Biogen Idec Announce Positive Results from Phase II Trial of Rituxan in Relapsing-Remitting MS

South San Francisco, Calif. and Cambridge, Mass. -- August 28, 2006 -- Genentech, Inc. (NYSE: DNA) and Biogen Idec, Inc. (Nasdaq: BIIB) announced today that a Phase II study of Rituxan® (Rituximab) for relapsing-remitting multiple sclerosis (RRMS) met its primary endpoint. The study of 104 patients showed a statistically significant reduction in the total number of gadolinium enhancing T1 lesions observed on serial MRI scans of the brain at weeks 12, 16, 20 and 24 in the Rituxan-treated group compared to placebo. Genentech and Biogen Idec will continue to analyze the study results and will submit the data for presentation at an upcoming medical meeting. "These initial results exceeded our expectations," said Hal Barron, M.D., Genentech senior vice president, development and chief medical officer. "Showing a significant benefit at 24 weeks in this small Phase II trial supports our hypothesis that selective B-cell targeted therapy may play an important role in the treatment of MS."

Rates of overall adverse events and serious adverse events were comparable between the two treatment groups. Serious infectious adverse events occurring in Rituxan-treated patients included gastroenteritis and bronchitis. The overall rates of infection were comparable among the two treatment groups with an increase in the rates of nasopharyngitis, upper respiratory tract infections, urinary tract infections and sinusitis in the Rituxan-treated patients. There were more first infusion-related reactions with Rituxan, the majority of which were mild to moderate and were generally reversible with medical intervention. The companies continue to monitor the long-term safety of Rituxan treatment.

About the Study

This Phase II randomized, double-blind, parallel-group, placebo-controlled, multicenter study was designed to evaluate safety and efficacy of Rituxan in adults with RRMS. A total of 104 patients at 48 sites in the U.S. and Canada were randomized to receive either a single treatment course of Rituxan or placebo. Gadolinium-enhancing lesions visible by MRI scans were assessed at 12, 16, 20 and 24 weeks. Patients will continue to be followed for 48 weeks.

About Rituxan

Rituxan is a therapeutic antibody that targets and selectively depletes CD20-positive B-cells without targeting stem cells or existing plasma cells. In addition to RRMS, Rituxan is being studied in primary progressive MS, for which there is currently no FDA-approved therapy. Rituxan is being studied in other autoimmune diseases with significant unmet medical needs, including systemic lupus erythematosus, lupus nephritis and ANCA-associated vasculitis. Rituxan, discovered by Biogen Idec, first received FDA approval in November 1997 for the treatment of relapsed or refractory, low-grade or follicular, CD20-positive, B-cell non-Hodgkin's lymphoma. It was also approved in the European Union under the trade name MabThera® in June 1998. In addition, Rituxan received FDA approval in February 2006 for the treatment of diffuse large B-cell lymphoma (DLBCL) in combination with CHOP (cyclophosphamide, doxorubicin, vincristine and prednisone) or other anthracycline-based chemotherapy regimens in previously untreated patients, as well as in combination with methotrexate to reduce signs and symptoms in adult patients with moderately-to-severely active rheumatoid arthritis who have had an inadequate response to one or more tumor necrosis factor antagonist therapies.

Memory and MS

By Dr. Dennis Bourdette
Oregon Health Sciences University

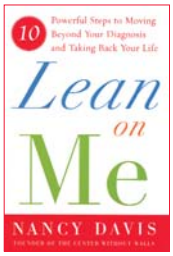
MS attacks nerve fibers in the brain as well as the spinal cord. So it is not too surprising that about half of the people with MS experiences changes in the cognitive function. These include difficulties with concentration, short term memory, new learning, word and name finding and decision making. While people with MS do not become demented like someone with Alzheimer's disease, their cognitive problems can interfere with their ability to remain employed and function socially. Currently there are no treatments that improve cognitive performance among people with MS. But scientists who are part of the Nancy Davis Center Without Walls think an ancient herb may prove to be useful for treating cognitive difficulties in people with MS.

The Ginkgo biloba tree is a "living fossil" and its leaves have been used for many centuries as a Chinese medicine. Extracts from ginkgo contain anti-oxidants and other substances that can affect chemicals within the brain involved with memory and concentration. In Oregon about 20% of people with MS take ginkgo and many report that it helps them. Because of this, investigators at the Oregon Health & Science University MS Center conducted a clinical trial of ginkgo in MS.

In this study, supported by the NDCWW, 39 people with MS and cognitive complaints underwent six tests of cognitive performance. They were then randomly assigned so that 20 received ginkgo (120 mg twice a day) and 10 received placebo (given twice a day). The study was "blinded," which meant that the subjects participating in the study and the investigators did not know who was receiving ginkgo and who was receiving placebo. After three months the MS patients had their cognitive performance was re-tested. At the end of the study, the investigators found that the people with MS taking ginkgo reported improvement in their

(MEMORY continued on Page 13)

My Very Necessary
Medical I.D. Card™



My Very Necessary Medical I.D. Card™ now available is an essential part of the book "Lean on Me," by Nancy Davis as a key to empower yourself and take charge of your health and the welfare of your loved ones.

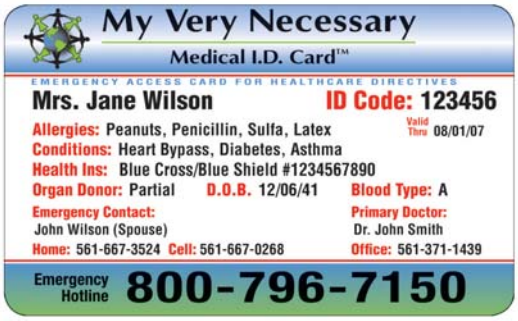
WHEN YOU CAN'T SPEAK FOR YOURSELF

Every year 98,000 people in the United States die from preventable medical mistakes and 400,000 people are injured by these mistakes making this the sixth leading cause of death in our country.

BE PROACTIVE

My Very Necessary Medical I.D. Card™ can help reduce the margin of error in an emergency by providing critical information when a patient is unable to speak for himself. You can't plan for these moments, but you can be prepared.

My Very Necessary Medical I.D. Card™ fits easily in your wallet and contains your most essential medical information in case of an emergency when you can't speak for yourself. Our service allows you to store and retrieve your medical and legal records and will assist in reducing healthcare inefficiencies, limit the possibility of medical errors, and ensure one's legal wishes. It will empower the Member by making them more active partners in the managing and maintenance of their own healthcare records. We have developed a safe and secure method to organize, store, and immediately access one's important medical information and legal wishes from anywhere in the world by using the internet or calling one of our customer service associates 24/7.



NEVER LEAVE ANYTHING TO CHANCE

As a member of My Very Necessary Medical I.D. Card™, you can create your own personal healthcare profile. Organize and update your healthcare and legal records. When you need life saving medical information in an instant it can be seen on the front of the Medical ID Card, or view your information from the Emergency Medical Records login section of the website. My Very Necessary Medical I.D. Card™ has partnered with AccessMyRecords.comSM to offer you this valuable service.

HOW DO I GET MY CARD?

Please visit our website at www.vnmedical-idcard.com. You can see the full range of services My Very Necessary Medical I.D. Card™ has to offer. Just click on the Join Now button and fill out a simple form.

Information Hotline:
800-796-6431

WE MOVED!

PLEASE NOTE

THE RACE TO ERASE MS OFFICE

NEW ADDRESS:

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Phone 310-440-4842
Fax 310-471-4975

THE FACTS of Multiple Sclerosis:

MS STRIKES AT LEAST TWICE AS MANY WOMEN AS MEN

MS IS EXTREMELY UNPREDICTABLE

MS STRIKES MOST OFTEN BETWEEN AGES 20 TO 50

MS CAN CRIPPLE

MS IS THE MOST COMMON CAUSE OF NEUROLOGICAL DISABILITY (EXCLUDING TRAUMA) ARISING IN EARLY TO MIDDLE ADULTHOOD

The Center Without Walls
ROUNDTABLE FORUM -- May 13, 2006

Once a year the Race to Erase MS provides a special a unique opportunity for the public to hear the Nancy Davis Center Without Walls doctors discuss the newest and most promising information available for people with multiple sclerosis. On May 13, 2006 the doctors from the Center Without Walls met for the annual MS Round Table discussion at the Hyatt Regency Century Plaza. Guests included individuals with MS seeking support and information on the latest findings to treat the disease as well as families and friends of those suffering from MS.

The doctors on the panel included our main investigators in neurology from the Center Without Walls, Dr. Dennis Bourdette, Dr. Jeffrey Cohen, Dr. Stephen Hauser, Dr. Adam Kaplan, Dr. Emmanuelle Waubant, Dr. Stephen Waxman, Dr. Howard Weiner and Dr. Leslie Weiner, as well as Nancy Davis, Attorney Mark Barondess and Claudia Curry Hill, all of whom are MS patients.

We would like to thank our sponsors Genetech, Hyatt Regency Century Plaza, Le Pan Quotidien and Fiji Water for their invaluable donations towards this very important educational opportunity which was free and open to the public. If you were unable to attend our symposium but would like a copy of the program on DVD, please contact (310) 440-4842.

Please make sure to Save The Date for next year, April 14, 2007 at the Hyatt Regency Century Plaza

Dr. George Eisenbarth, Dr. Dennis Bourdette, Dr. Emmanuelle Waubant

Dr. Stephen Hauser and Nancy Davis

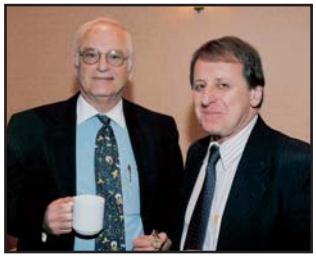
Roundtable Question and Answer Session with Panel

Dr. Adam Kaplin, Dr, Jeff Cohen, Dr. Howard Weiner, Dr. Stephen Hauser, Dr. Leslie Weiner, Claudia Curry Hill, Dr. Dennis Bourdette, Dr. Emmanuelle Waubant, Nancy Davis, Mark Barondess and Dr. Stephen Waxman

Dr. Peter Calabresi with Dr. Jeff Cohen and Colleague

Ms Roundtable Panel

Dr. Emmanuelle Waubant with Amy and David Nader



Dr. Leslie Weiner and Dr. Stephen Waxman

The Center Without Walls Collaborating Physicians

Dr. Jack Antel,
Montreal Neurological Hospital
Dr. Rob Bakshi
Brigham & Women's Hospital
Dr. Bruce Bebo,
Oregon Health Sciences
Dr. Guy Buckle, Harvard
Brigham & Women's Hospital
Dr. Michael Carrithers,
Yale University
Dr. Tanuia Chitnis, Harvard
Brigham & Women's Hospital
Dr. Jeffrey Cohen,
Cleveland Clinic
Dr. George Eisenbarth,
University of Colorado,
Health Sciences Center
Dr. Elizabeth Fisher,
Cleveland Clinic
Dr. Bob Fox,
Cleveland Clinic
Dr. Suzanne Gauthier, Harvard
Brigham & Women's Hospital
Dr. Claude Genain,
University of California, San Francisco
Dr. Wendy Gilmore,
University of Southern California
Dr. Bruce Gold,
Oregon Health Sciences
Dr. Douglas Goodin,
University of California, San Francisco
Dr. Charles Guttman, Harvard
Brigham & Women's Hospital
Dr. Halina Hoffner,
Oregon Health Sciences
Dr. Norman Kachuck,
University of Southern California
Dr. Sanjay Keswani,
Johns Hopkins
Dr. Samia Khoury, Harvard
Brigham & Women's Hospital
Dr. Brian Kotzin,
Amgen
Dr. Albert Lo
Yale University
Dr. Brett Lund,
University of Southern California
Dr. Jorge Oksenberg,
University of California, San Francisco
Dr. Daniel Pelletier,
University of California, San Francisco
Dr. Jana Preiningerova,
Yale University
Dr. Richard Ransohoff,
Cleveland Clinic
Dr. Bruce Trapp,
Cleveland Clinic
Dr. Arthur Vandenbark,
Oregon Health Sciences
Dr. Ruth Whitham,
Oregon Health Sciences
Dr. Scott Zamvil,
University of California, San Francisco

The Center Without Walls: Medical Research Update

Promising new breakthroughs at each center bring hope to those with MS!

The Nancy Davis Center Without Walls (NDCWW) is made of seven groups with complementary expertise in MS research. The NDCWW exchanges scientific information and collaborates at multiple levels. Several new and exciting scientific achievements in the past year have continued to fuel the NDCWW's commitment to find a cure for multiple sclerosis. Scientific meetings provide an open forum for discussion and presentation of novel ideas and findings. Centers with specific expertise provide valuable support to others, with each having a unique background. This constant exchange process is nurturing an outstandingly rich research activity. During these meetings, 30 key investigators of the 7 institutions shared information prior to publication. The specific scientific accomplishments of individual Centers are contained in the individual reports. The highlights are presented below.

Cleveland Clinic,

Director, Richard Rudick, M.D.

The Mellen Center has found that immune communicating molecules called chemokines may be important in the brain repair process. Certain chemokine receptors are essential to development of brain inflammation in the animal model of MS. Identifying which of the chemokine receptors should be targeted will result in the development of novel treatments. The team at the Mellen Center has also reported that women immune system is strongly skewed towards damaging inflammation-causing chemicals, resulting in many more women than men reaching a "threshold" of auto-immune diseases such as MS. This dramatic skewing is not observed with non-MS-relevant proteins, nor is it seen between healthy women and men.

Harvard Brigham and Women's Hospital,

Director, Howard Weiner, M.D.

The team at Harvard is analyzing the linkage of certain blood markers with MS activity and response to MS drugs. The team has also developed new MRI techniques to measure the volume of the spinal cord. They hope that spinal volume is correlated to MS disability and will become a valuable new outcome to monitor the effect of promising MS drugs. Finally, the team is investigating the molecular mechanisms that underline the lack of remyelination and neuro-regeneration that occurs in MS. Identifying such inhibitory mechanisms will allow to reverse lack of tissue repair.

Johns Hopkins

Directors, Peter Calabresi, M.D. and John Griffin, M.D.

Permanent disability in MS is thought to occur because of irreversible damage to the nerve "wires" called axons. The goals of the team at Johns Hopkins is to define the mechanisms by which axon injury occurs in MS and develop imaging biomarkers of axon and myelin injury. They are using classical inflammatory animal models of MS as well as some novel non-inflammatory models in which the myelin is genetically absent or chemically altered. These are providing information as to how axons that have lost their myelin die, e.g. because they are transected by immune cell derived enzymes, or because they have lost growth factor support from the myelin. The team at Johns Hopkins has found out that this occurs through different communication pathways and hope to take advantage of the protective signals to devise axon protective therapies.

Oregon Health Sciences University

Director, Dennis Bourdette, M.D.

The team at OHSU discovered that a vaccine made from the T cell receptor for the treatment of MS turns on a special type of protective white blood cells, called Treg cells that are deficient in people with MS. This vaccine help restore the balance of the immune system in patients with MS. The team also found that a special class of drugs called non-immuno-suppressive immunophilin ligands can have neuroprotective effects in the animal model for MS. Finally, they have engineered proteins, called recombinant T cell ligands that in animal models of MS turn deleterious white blood cells into harmless players. The team will translate this exciting finding into a clinical trial in patients with MS this year in collaboration with USC.

THE RACE TO ERASE MS

University of California, San Francisco

Director, Stephen Hauser, M.D.

UCSF team has followed on its effort of DNA collection from populations at high, moderate and low risk of MS to analyze their genetic make-up and understand the rules of MS inheritance. Multiple collaborations within the Center Without Walls allow for outstanding recruitment. The team has completed one of the most powerful genetic study ever performed in MS, and reported that HLA genes, the master regulators of the immune response, constitute the strongest genetic factor affecting MS susceptibility. These data have profound implications for the future directions of MS genetics research. UCSF has also continued to study to the influence of statin drugs, which lower the levels of cholesterol, on the immune system in association with other MS medications such as Copaxone.

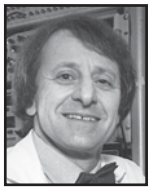
University of Southern California, Los Angeles

Director, Leslie P. Weiner, M.D.

The team at USC Center has been working in the new field of stem cell research. They have been studying both human adult (derived from umbilical cord cell, baby teeth and human embryonic stem cells) and approved for federal funding. They have been successful in culturing oligodendroglial precursor cells (when mature, these cells are capable of making myelin). This year, they have shown that these cells, when injected into mice that are genetically devoid of myelin, can myelinate axons with human myelin. The team at USC expects that precursors derived from stem cells have the hope of repair and regeneration, either in the natural state or after being engineered to resist the hostile environment present in the central nervous system of an MS patient.

Yale University

Director, Stephen Waxman, M.D.



The goal of research at the Yale Center is to discover biomedical strategies that will restore and protect neurological function in MS and translate such discoveries toward effective treatments for people with MS. Key objectives are to investigate the potential of cell transplantation based approaches in restoring function in MS, preserve neurological function within the injured brain and spinal cord in MS, via novel strategies that protect axons so that they do not degenerate; study the molecular physiology and pathophysiology associated with nerve impulse conduction, and identify strategies that will restore normal conduction within demyelinated axons and evaluate the potential of novel neurorehabilitative therapies in restoration of gait and motor function following in MS.

Biogen Idec and Elan Announce Availability of TYSABRI® for Treatment of Relapsing forms of Multiple Sclerosis

Cambridge, MA and Dublin, Ireland - July 24, 2006 - Biogen Idec (NASDAQ: BIIB) and Elan Corporation, plc (NYSE: ELN) today announced the commercial availability of TYSABRI® (natalizumab) for the treatment of relapsing forms of multiple sclerosis (MS) in the U.S. As previously announced, the U.S. Food and Drug Administration (FDA) approved the supplemental Biologics License Application (sBLA) for the reintroduction of TYSABRI as a monotherapy treatment for relapsing forms of MS to slow the progression of disability and reduce the frequency of clinical relapses.

The FDA granted approval for reintroduction based on the review of TYSABRI clinical trial data; revised labeling with enhanced safety warnings; and a risk management plan (TOUCH Prescribing Program) designed to inform physicians and patients of the benefits and risks of TYSABRI treatment and minimize potential risk of progressive multifocal leukoencephalopathy (PML). Because of the increased risk of PML, TYSABRI is generally recommended for patients who have had an inadequate response to, or are unable to tolerate, alternate MS therapies.

Under the TOUCH Prescribing Program, only prescribers, infusion centers and pharmacies associated with infusion centers registered in the TOUCH program are able to prescribe, infuse or distribute TYSABRI. Elan has contracted with a single distributor, ICS, a division of AmerisourceBergen Specialty Group, and 12 specialty pharmacies: Caremark, CuraScript, PharmaCare, PrecisionRx Specialty Solutions, Medmark, BioScrip, McKesson Specialty, Option Care, Cigna Tel-Drug Specialty Pharmacy, Aetna Specialty Pharmacy, Prescription Solutions, and Accredo NovaFactor. ICS and the 12 specialty pharmacies have been trained on the TOUCH Prescribing Program and are obligated to follow the requirements of the program in order to purchase and distribute TYSABRI to authorized infusion sites and central pharmacies.

In addition, following the recent approval by the European Commission, the companies have introduced TYSABRI in several countries in Europe.

http://www.biogenidec.com/site/019_0.html?pr_id=../news/BiogenIDECPR_136.htm

THE RACE TO ERASE MS

The Center Without Walls:
Group Overview of Clinical Trial Projects

The Nancy Davis Center Without Walls (NDCWW) has become a leading consortium in the development of promising agents for multiple sclerosis (MS). The strategy of the NDCWW is first to evaluate novel treatment approaches in single-center or two-center studies which, if proven promising, are later developed collectively. During the past year, the Center Without Walls has made major contributions toward developing a cure for multiple sclerosis.

COLLABORATIVE STUDIES

The Center Without Walls now has several collaborative studies underway in various stages of development.

Studies Completed In the Past Year

Six of the Centers (Cleveland, UCSF, USC, Yale, Johns Hopkins and OHSU) are also participating in a study that will compare the benefits of adding monthly Solumedrol or oral methotrexate to Avonex in patients who experience exacerbations while on Avonex. This study, headed by the Cleveland MS center, is the first large pivotal study of combination therapy. Dr. Calabresi at Johns Hopkins is part of the Data and Safety Monitoring Board of this study. At this time, all patients have completed the 12-month study period and data is being analyzed. The study designed by the Cleveland Clinic is sponsored by Biogen Idec. We anticipate that the results of this study will be available during the Fall 2006.

Ongoing Studies

The NDCWW has continued or initiated patient enrollment in several collaborative clinical trials of oral medications for MS that have been designed by the NDCWW:

- Interferon tau in patients with relapsing remitting MS or early MS
- Lipitor in early MS
- Memantine for MS cognitive impairment

The Center has also continued three collaborative studies of a novel intravenous drug, rituximab, in relapsing remitting and primary progressive MS.

Oral interferon tau

Four of the Centers (Harvard, OHSU, USC and UCSF) are collaborating on the study of oral interferon tau in patients with relapsing remitting MS or clinically isolated syndromes suggestive of early MS. Jeff Cohen at the Cleveland Clinic serves on the Data and Safety Monitoring Board.

We have enrolled 28 patients in this study. All the patients have completed the study except for one who will be done with study participation in January 2007. The medication has been well tolerated so far. This important ongoing study will evaluate whether oral interferon tau decreases MS activity on serial brain MRI scans. Oral interferon may turn out to be comparable to approved interferon beta with fewer side effects, and it is easier to administer. We anticipate that data analysis will be completed in February 2007 for report to the FDA. We plan to submit an abstract to the American Academy of Neurology for presentation of the data to the public in April 2007.

Lipitor (atorvastin) for patients with early multiple sclerosis

Six of the Centers(UCSF, Cleveland, USC, Yale, OHSU and Johns Hopkins) are following up on the exciting work in animal models suggesting that atorvastatin (taken by millions of individuals to treat high blood cholesterol) will provide therapeutic benefit to patients with MS. The reason we believe the medication may treat MS is that this drug significantly decreases the activation of the immune system that occurs in MS. Since atorvastatin may also have neuroprotective properties, the centers also use spectroscopy, a sophisticated magnetic resonance technique, to determine whether atorvastatin prevents brain damage. This is an exciting trial, as the medication is given orally and is much safer than many immunologic therapies considered for multiple sclerosis. This is also one of the first times the CWW centers are able to share their advanced magnetic resonance technology. Fourty six patients have been enrolled nationwide. We are planning to enroll approximately 152 patients with their very first MS event and monitor for one year the effect of the drug compared to placebo. The study designed by UCSF is sponsored by the Immune Tolerance Network, Biogen Idec and Pfizer.

Memantine for cognitive impairment in MS

This year OHSU, in collaboration with USC, has continued a double blind placebo-controlled pilot trial of memantine for cognitive impairment in MS. Memantine is a glutamate receptor antagonist that has been shown to improve cognition in Alzheimer's disease. This trial is designed to assess whether memantine will improve cognition among MS patients.

Treatment that decreases antibodies against the nervous system

All seven Centers are involved in a new treatment strategy using rituximab, a monoclonal antibody against the B cell receptor CD20 that depletes B cells (B cells make antibodies against constituents of the brain). We believe that this strategy of depleting B cells and lowering the level of antibodies they make may prevent exacerbations and subsequent nerve damage. Rituximab is administered intravenously every six months. It is FDA approved for non-Hodgkin lymphoma and is relatively well tolerated. The small study of retreatment safety is fully enrolled (26 patients) and data will be analyzed early 2007. The large double-blind study in relapsing remitting MS that will test the safety and preliminary efficacy of one round of injections of the drug vs. place-

bo (Protocol Chairs: Emmanuelle Waubant, UCSF and Peter Calabresi, Johns Hopkins) is fully enrolled (100 patients). The data will be analyzed in September 2006 and we anticipate that the results will be presented to the public early 2007. Finally, the large double blind trial that will evaluate the efficacy of rituximab in patients with primary progressive MS over two years (Protocol Chairs: Kathleen Hawker, Cincinnati and Jack Antel, Montreal) is fully enrolled (400 patients). These exciting studies are likely to reveal the exact role of B cells in MS, which has been poorly understood until now. Genentech, the study sponsor, has agreed to support state-of-the-art immunological studies that will help understand the role of B cells in MS and the effect of the medication.

Studies About to Start

Cell based gene therapy

USC, in collaboration with UCSF is about to launch a cell based gene therapy study. This is a unique delivery system that puts human cells engineered to slowly release a myelin protein in a special chamber and then placed under the skin to desensitize MS patients to myelin proteins.

Recombinant T Cell Ligand Therapy

Two of the Centers, OHSU and USC, will initiate a Phase I safety and dose finding study of the DR2-MOG 35-55 RTL, referred to as RTL1000. Patients with MS and positive for a specific marker (DR2+) will receive single i.v. infusions of RTL1000 of increasing doses (6-300 mg). Outcomes will be safety, including MRI monitoring for disease activation and antibody formation to the RTL1000. This is the first step in developing RTL1000 as a novel immunotherapy for MS.

Database sharing

UCSF and OHSU will start this year sharing anonymous clinical data through a database system that has been used at UCSF for the past 5 years. Sharing this type of information enhances our pace to better understand MS.

SINGLE-SITE PILOT STUDIES

Some very novel agents are currently being developed by individual NDCWW centers. Single-site studies serve the valuable function of deriving preliminary data that, if encouraging, will come to fruition as larger collaborative trials.

Studies Completed in the Past Year

The Harvard team has completed a study of CTLA4-Ig in relapsing MS. CTLA-4Ig blocks T cell activation and suppresses inflammation. The data from the study showed that CTLA-4Ig is safe in MS and there is evidence of biologic activity by changes in the immune markers in the blood. They are now planning a phase II study.

The Oregon Health Center has completed the analysis of a single-site study of vaccination with a portion of the T cell receptor that is well tolerated in patients with MS. This vaccine triggers a vigorous immune response to the vaccine and boosts regulatory cells in most patients. This study has provided data needed to successfully design the follow-up trial of this vaccine in MS.

Ongoing Studies

Following the finding that Salbutamol (used in asthma) decreases the release of IL-12, a pro-inflammatory product that is deleterious in MS, the group at Harvard has continued with their study of Copaxone plus Salbutamol to determine if the association enhances the anti-inflammatory effect of Salbutamol. Being able to decrease the release of the pro-inflammatory product could prevent exacerbations of MS.

The Yale group has started to evaluate safety and preliminary efficacy of oral Dilantin (a medication for epilepsy) as a potential neuroprotective agent in MS. In the animal model, this medication has protected the central nervous system from major brain cell death in the model for MS. As this oral agent has been used for decades in humans and is safe, it is exciting to prepare for a larger study that will confirm whether the drug also protects the brain of MS patients. Support is requested for MRI and a research assistant for this study.

OHSU is continuing with the study of omega-3 fatty acid in the treatment of depression in patients with MS and with the study of American ginseng for treatment of MS fatigue. The team is also continuing with the study of lipoic acid in MS and memantine for cognitive impairment in MS.

Studies About to Start

Neuroprotection with riluzole in early MS (see confidential protocol included at the end)

UCSF will initiate during the Fall 2006 a study of riluzole in patients with early MS. Riluzole is an approved drug already shown to slow down Lou Gehrig's disease. Patients will receive two year therapy with riluzole or placebo in addition to interferon beta-1a as a standard of care. Fourty patients will participate to this study at UCSF. Sanofi-Aventis is providing free riluzole and placebo, and Biogen Idec is providing free interferon beta-1a. Support is requested towards scanning patients in this study and study coordinator effort.

TCR Peptide Vaccination

OHSU will initiate another open label trial of T cell vaccination, NeuroVax. Twenty subjects will be enrolled. The primary purpose of the trial is to determine if less frequent injections (three monthly injections followed by injections every three months) of NeuroVax can effectively maintain immune responses to the vaccine.

Lipoic acid

After the on-going pharmacokinetic study of lipoic acid will be completed, OHSU will design in the coming year a trial of oral lipoic acid as an adjuvant therapy to interferon beta for patients with secondary progressive MS.

PHOTO GALLERY
DISCO FEVER TO ERASE MS: May 12, 2006


Ryan Seacrest, Harry Hamlin, Dimitri Hamlin

Kenny Rickel, Nancy Davis, Tommy Hilfiger


Tommy Hilfiger Fashion Show Finale


Sharon Osbourne and Stevie Wonder


Nancy Davis with Kool & The Gang, Sister Sledge, Natalie Cole


Lisa Rinna and Louie Van Amstel


Kimberly and Ruby Stewart, Penny Lancaster and Rod Stewart


Kool & The Gang and Natalie Cole


Lindsay Lohan, Tommy Hilfiger and Nicole Richie


Barbara Davis with Alex and Arda Yemenidjian


Jerry and Tawny Sanders


Tom Arnold, Brooke Shields and Chris Henchy


Rod Stewart and David Foster


Ken Rickel, Debbie and Jimmy Lustig and Nancy Davis


Nicky Hilton and Brandon Davis


Jamie Tisch, Charles Perez, Steve Tisch

Nicole Richie


Rebecca Hernreich, Mary Virginia Knight, Henry Fong, Gail and Dennis Flynn, Jo Champa


Ryan Seacrest and Randy Jackson


Amy Nader, Lyndi Hirsch, Steven Holtzman, David Nader


Steven Cojocaru and Linda Thompson


Dana Davis and Lynn Palmer


Jena King,Charles Perez, Crystal Lourd, Jamie Tisch


Scott Martin and Lauralee Bell Martin


Macy Gray


Reese and Mary Milner, Jon Lovitz, Lynn Palmer and Robert Bloomingdale


Anne Heche and Nancy Davis


Rachel Bilson


Jamie Tisch and Nancy Davis

Anne Heche, Natalie Cole, Kool & The Gang, Ken Rickel and Nancy Davis


Carson Daly, Nancy Davis and Ken Sunshine


Iris and Michael Smith, Arlene Hirschfeld


Sharon Osbourne, Larry Bruce, Kelly Osbourne


Melinda Clarke and Rachel Bilson with friends


Lindsay Lohan


Byron Allen with Friend, Suzanne de Passe, Nick Chavez


Stevie Wonder, Nancy Davis and Kai Wonder


David Foster and Barbara Davis


Alexander Davis and Friends


Natalie Cole and Debbie Lustig


Brandon and Nancy Davis


Marcy Taub, Erica Courtney, Lynn Palmer and Tracy Danza


Arda and Alex Yemenidjian


Paris Hilton


Tony Williams with Guests

Tom and Shelby Arnold


May Ahringer, Caroline Leduc, Pam McMahon


David Charvet and Brooke Burke

Multiple Sclerosis Health Advisory and Resource Center

Walk Aid

WalkAide is a medical device that, after more than a decade in development, has received marketing clearance from the FDA for improving walking ability of people suffering from Foot Drop. Foot Drop is a condition caused by weakness or paralysis of the muscles involved in lifting the front part of the foot, which causes a person to drag the toe of the shoe on the ground or slap the foot on the floor.

Invented by a team at the University of Alberta, WalkAide simulates the typical nerve-to-muscle signals in the leg and foot, effectively lifting the toes at the appropriate time during the gait cycle. The resulting movement is a smoother, more natural and safer stepping motion. Users are able to walk faster and for longer distances with less fatigue. In fact, many people who try WalkAide experience immediate and substantial improvement in their walking ability, which increases their mobility, functionality, and overall independence. WalkAide is a sophisticated medical device that can only be prescribed by a physician. As with all orthoses, a thorough evaluation by a credentialed and trained medical professional will determine if WalkAide is right for you.

For more information please visit: www.ininc.us

Direct Services for MS

The mission of Familia Unida Living with Multiple Sclerosis (FULWMS) is to Enlighten, Educate, and Unite Families affected by Multiple Sclerosis and other debilitating diseases in our culturally diverse communities and to offer support services to diverse populations that request our attention. It is our ethical responsibility to promote awareness of the growing number of individuals afflicted by MS and provide culturally sensitive programs. We advocate for preservation of cultural diversity and enhancement of the quality of life.

Many of our members have been able to obtain access to healthcare, educational services and resources that encourage maximum quality of life. FULWMS works with more than 1000 community partners to provide comprehensive services. All our services are provided free of charge. Services include, and are not limited to various resources in: English, Spanish and Chinese. For more info call (323) 261-5565 / 877 AYUDA-MS

Acute Disseminated Encephalomyelitis

Acute disseminated encephalomyelitis (ADEM) is a neurological disorder characterized by inflammation of the brain and spinal cord caused by damage to the myelin sheath. The myelin sheath is the fatty covering, which acts as an insulator, on nerve fibers in the brain. ADE may occur in association with a viral or bacterial infection, as a complication of inoculation or vaccination, or without a preceding cause. Onset of the disorder is sudden. Symptoms, which vary among individuals, may include headache, delirium, lethargy, coma, seizures, stiff neck, fever, ataxia, optic neuritis, transverse myelitis, vomiting, and weight loss. Other symptoms may include monoparesis (paralysis of a single limb) or hemiplegia (paralysis on one side of the body). The disorder occurs in children more often than in adults.

Optic Neuritis

Optic neuritis is an inflammation of the optic nerve. With optic neuritis, the nerve becomes swollen and the nerve fibers do not work properly. If some or all of the nerve fibers become inflamed and do not function properly, vision becomes blurred.

What you need to know about Devic's Disease

(Synonyms: neuromyelitis optica, NMO, Devic's syndrome)

Devic's disease is an inflammatory disease of the central nervous system in which there are episodes of inflammation and damage to the myelin (fatty, protective covering of nerves) that almost exclusively affect the optic (eye) nerves and spinal cord. It usually causes temporary blindness, occasionally permanent, in one or both eyes. It can also lead to varying degrees of weakness or paralysis in the legs or arms, loss of sensation, and/or bladder and bowel dysfunction from spinal cord damage.

Types

It appears as though there are two major types of Devic's disease. In the first type, optic neuritis, (inflammation of the optic nerve), and myelitis, (inflammation of the spinal cord), episodes tend to come very close together often within days or weeks, and there is no recurrence after the initial flurry of symptoms. In the second form, repeated episodes of optic neuritis and myelitis occur that are separated by months or years.

Differences from Multiple Sclerosis

In well established cases of Devic's disease, it is usually possible to accurately tell the difference between Devic's disease and MS. However, early in their course, it may be difficult to definitively separate these two conditions. However, there are some differences.

Devic's disease affects only the optic nerves and spinal cord, whereas MS affects the brain as well. Attacks of Devic's disease tend to be more frequent and severe than in MS, though this is not always the case. An MRI of the brain is typically normal in Devics disease,

(DEVICS continued on Page 13)

(DEVICS continued from Page 12)

although this is not always the case; in MS the MRI of the brain typically shows many areas of inflammation. An MRI of the spinal cord shows large extensive areas of inflammation of the spinal cord whereas in MS typically the areas are much smaller.

Spinal fluid studies tend not to show the typical elevation of antibodies detected in patients with MS, although occasional patients may show this abnormal pattern of antibodies.

Outcomes of Devic's Disease

The course of Devic's disease is highly variable. It largely depends on whether there is a tendency for relapses to occur after the initial flurry of symptoms that leads to the diagnosis.

In general, attacks of Devic's disease tend to be more frequent and severe than they are in MS. The major risk to patients is severe damage to the upper spinal cord, which can lead to inability to breathe on one's own. This may be fatal. However, some patients with Devic's disease seem to enter a long period of time where the disease remains stable. Devic's disease has not been studied in large enough populations to predict the outcome of individual cased with great certainty.

Complications of Devic's Disease

Permanent blindness may occur in one or both eyes. Permanent loss of strength or sensation in the arms or legs may occur. Inability to control the bowel or bladder function may also occur.

At any point in this disease, patients may develop sudden brief, repetitive spasms. These spasms may also occur in MS, but they are very common in Devic's disease. With these spasms, patients develop prolonged tightening of arms and legs that last for 15 seconds to 2 minutes. They may be painful and recur several times a day. In most cases, they respond very successfully to treatment with an anticonvulsant medication.

Genetic Research and MS

By Dr. Peter Oxenberg, UCSF

Genes, the fundamental hereditary units, are likely to play an important role in determining who is at risk for developing MS, how the disease progresses, and how someone responds to therapy. However, the role of genes in MS is likely to be complex. This is in contrast to other diseases that have a simple genetic basis. For example, Huntington's Disease or Cystic Fibrosis are caused by a single dominant gene--individuals carrying the wrong version of the gene, will be affected. In MS, it is more likely that many different genes are involved, each with a small effect. We believe that the genes associated with this disease are not themselves abnormal. Rather, they include some specific structural variations that may or may not be common in the population. In fact, some of these variations may be advantageous to have. However, in some combinations these normal genes appear to predispose some individuals to develop MS following exposure to an undefined environmental factor or factors.

Whereas identification of all the genetic contributions to MS has long been recognized as a major step toward treating the disease, this has remained an unmet challenge. Recent technological advances together with a better understanding of the genome architecture are opening new and promising opportunities to unravel the genetic basis of MS. Understanding the role of genes in MS could revolutionize the way this disease is diagnosed and treated. For additional reading on MS Genetics research see The Multiple Sclerosis Genetics Project at the University of California San Francisco (http://www.ucsf.edu/msdb)

(RACE continued from Page 1)

with the Stars" and a fabulous trip to St. Regis Bora Bora which included airfare on American Airlines.

Among the guests were such superstars as Paris and Nicky Hilton, Nicole Richie, Jon Lovitz, Rod Stewart, Randy Jackson, Lisa Rinna, Kelly Osbourne, Lara Flynn Boyle , Stevie Wonder, Tom Arnold and Brooke Shields

The party was decked out with a disco fever touch by well known designer, Mindy Weiss and the unbelievable floral arrangements with mirrored disco balls were generously donated by Marks Garden, also to Sauza Tequila, Fiji Water, Rutherford Winery, Anheuser Busch and Dirty Sue. Frederic Fekkai and MAC created the amazing hair and makeup for the fashion show.

Thank you again to everyone involved in helping to make this evening such a grand success and make sure to save the date of April 13, 2007 for our 14th Annual Race to Erase MS event.

(MEMORY continued from Page 3)

cognitive performance while those taking placebo did not. Also, those taking ginkgo showed a significant improvement on one of the cognitive tests which assessed concentration and ability to switch tasks while those on placebo did not. Importantly, ginkgo was safe and none of the people taking ginkgo experienced side-effects.

"These results suggest that ginkgo may be a cost effective way of helping people with MS who experience changes in their mental efficiency," said Dr. Dennis Bourdette, who headed the team studying ginkgo. "This was a small study and we need to do a much larger study before we can say with certainty that ginkgo is helpful," concludes Dr. Bourdette. The team at the OHSU MS Center has applied for federal funding to do a placebo controlled trial of ginkgo involving 120 people.The results of this study will be published in the journal Multiple Sclerosis later this year.

Hopkins Scientists Use Stem Cells, New Cues to Awaken Latent Motor Nerve Repair

In a dramatic display of stem cells' potential for healing, a team of Johns Hopkins scientists reports that they've engineered new, completed, fully-working motor neuron circuits -- neurons stretching from spinal cord to target muscles -- in paralyzed adult animals.

The research, in which mouse embryonic stem (ES) cells were injected into rats whose virus-damaged spinal cords model nerve disease, shows that such cells can be made to re-trace complex pathways of nerve development long shut off in adult mammals, the researchers say.

"This is proof of the principle that we can recapture what happens in early stages of motor neuron development and use that to repair damaged nervous systems," says Douglas Kerr, M.D., Ph.D., a neurologist who led the Hopkins team.

"It's a remarkable advance that can help us understand how stem cells can begin to fulfill their great promise," says Elias A. Zerhouni, director of the National Institutes of Health. "Demonstrating restoration of function is an important step forward, though we still have a great distance to go."

The researchers created what amounts to a cookbook recipe to restore lost nerve function, Kerr explains. The approach could one day repair damage from such diseases as ALS (Lou Gehrig's disease), multiple sclerosis or transverse myelitis or from traumatic spinal cord injury, the researchers say. "With small adjustments keyed to differences in nervous system targets," Kerr says, "the approach may also apply to patients with Parkinson's or Huntington's disease."

In a report on the study, to be released online June 26 in the Annals of Neurology, the Hopkins team says 11 of the 15 treated rats gained significant, though partial, recovery from paralysis after losing motor neurons to an aggressive infection with Sindbis virus -- one that, in rodents, specifically targets motor neurons and kills them. The animals recovered enough muscle strength to bear weight and step with the previously paralyzed hind leg.

Kerr likens the approach to electrical repair. "Paralysis is like turning on a light switch and the light doesn't go on. The connectivity is messed up but you don't know where. We've asked stem cells to go where needed to fix the circuit."

For a brief period after a nerve dies, it leaves behind what's essentially an empty shell, with some scaffolding and non-nerve substances remaining. But with ES injections at the right time and place, and by adding the right cues, we've learned to restore the biological 'memory' for growing neurons, which is clearly still in place," he added.

The motor circuit engineering combines recent discoveries on stem cell differentiation, a growing understanding of early development of the nervous system, and insights into behavior of the nervous system in traumatic injury, Kerr notes.

"As adults, our cells no longer respond to early developmental cues because those cues are usually gone," says Kerr. "That's why we don't recover well from severe injuries. But that's what we believe we have changed. We asked what was there when motor neurons were born, and specifically what let motor neurons extend outward. Then we tried to bring that environment back, in the presence of adaptable, receptive stem cells."

In the study, Kerr's team first pre-treated cultures of mouse embryonic stem cells with growth factors that both increase survival and prompt specialization into motor neurons. Adding retinoic acid and sonic hedgehog protein -- agents that direct cells in the first weeks of life to assume the proper places in the spinal cord -- readied the conditioned ES cells for the motor neuron circuit that starts in the spinal cord. Then, stem cells were fed into the paralyzed rats' spinal cords.

Extending new motor neurons in an adult nervous system, however, meant overcoming hurdles. One involved myelin, the fatty material that insulates mature motor neurons. Like the coating on electrical wire, myelin prevents weakening of the traveling electrical impulse and lets it continue long distances. In humans, the myelinated sciatic nerve, for example, exits the spinal cord and extends to the leg muscles it activates, carrying impulses several feet.

Once laid down, however, myelin inhibits further nerve growth -- nature's way to discourage excessive wiring in the nervous system. "We had to overcome inhibition from myelin lingering in the dead nerve pathways," Kerr explains. Two recently-developed agents, rolipram and dbcAMP enabled that.

The assorted treatments let the new motor neurons survive, grow through the spinal cord and extend slightly into the outlying nervous system. A second hurdle remained in getting the neurons to skeletal muscle targets.

As suggested by earlier work by team member Ahmet Hoke on repair in the outlying, peripheral nervous system, the researchers applied GDNF, a powerful stimulator of neuron growth, to the remains of the newly-dead sciatic nerve at a point near its former leg muscle contacts. GDNF attracted the extending motor neurons, "luring" them to the muscles. To ensure a continuous supply of GDNF, the researchers relied on injected fetal mouse neural stem cells, a known source of the molecule.

Of some 4,100 new motor neurons created in the spinal cord, roughly 200 exited the cord and 120 reached skeletal muscle, forming typical nerve-muscle junctions, with appropriate, typical chemical markers. Microscopically, the neurons and their muscle associations appear identical

STEM CELLS continued on Page 15)

STEM CELLS continued from Page 14)

to natural ones in healthy animals.
Fifty of the new neurons were found to carry electrical impulses. (Because such testing is time and labor intensive, only a small area of leg muscle was assayed. The improved ability of treated rats, however, suggests more functional neurons are likely.) The rats gained weight, were more mobile in their cages and measures of muscle strength increased.

Animals treated without even one component of the "cocktail" experienced no such recovery. Novel ways of tracing the neurons back to their source assured the scientists that they indeed had come from the injected stem cells, not from lingering host neurons.

Research begins this summer to see how well the technique applies to human nerve recovery, using federally-approved human ES cells in larger mammals like pigs, Kerr says. Each of six academic institutions in a new collaboration will tackle a different major question of safety and effectiveness. Questions of tumor-formation, often a concern with ES cells, of the safety of surgery and of the ES cells' ability to form healthy motor circuits are major questions to answer. Several years of testing and thorough data evaluation would occur before applying to the FDA to approve human clinical trials. The study was supported by Families of SMA, Andrew's Buddies/Fight SMA, the ALS Association and The Robert Packard Center for ALS Research at Johns Hopkins, the Muscular Dystrophy Association, Wings Over Wall Street, and a grant from the NIH.

Kerr is a grantee of The Packard Center for ALS Research at Johns Hopkins. He also directs Project RESTORE, a Hopkins-based undertaking to advance therapies for transverse myelitis and multiple sclerosis.

Johns Hopkins Medicine
Media Relations and Public Affairs
Media Contact: Eric Vohr
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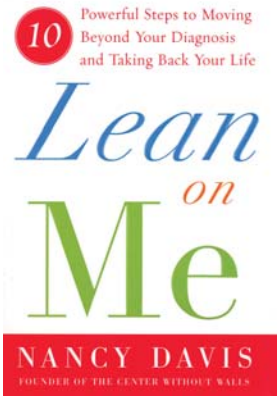
June 20, 2006

Lean On Me: A Book by Nancy Davis

A journey of inspiration



Lean On Me: Ten Powerful Steps to Being Your Own Health Advocate and Taking Back Your Life - "This is the quintessential book I wish had been available before I was diagnosed with MS," says Nancy Davis. Released on March 26, 2006 by Simon and Schuster, "Lean On Me" has been an inspirational journey for Nancy Davis. She is so blessed by the people she has met through her travels with "Lean On Me" and feels so fortunate to have had the opportunity to help other people facing a health crisis.

Nancy is so grateful to those who have read her book and is truly moved by the enormous amount of people who have expressed how their lives have been positively affected and expressed their appreciation of her writings. She has received so many supportive and beautiful notes of encouragement and is so appreciative of the personal stories that people have shared about their own triumphs as well as their struggles.

Dr. Stephen Hauser says it is a book that every doctor should be required to read in medical school. Her empowering and essential ten-step program teaches readers of all ages how to take charge of their own lives and their own health care in the face of life-altering or life-threatening diseases. She demonstrates how the average person can master the formidable American health care system to create a fulfilling life worth living. This truly inspirational book combines Nancy's moving personal story with practical, positive strategies for anyone grappling with the healthcare bureaucracy. Far more than a manual for coping with disease, Lean On Me is a guide to creating the life you want and building a future filled with promise.

"Lean on Me" is due out January 2, 2007 in soft cover. Upcoming "Lean on Me" events will be posted on erasems.org. You can order a copy of "Lean On Me" at www.amazon.com or www.barnesandnoble.com.

"For those who accept responsibility for protecting, nurturing, and enhancing their own health, this book has much to offer." – Sidney Poitier

"When America made the regretful decision to start treating patients as 'consumers,' a giant need was created for someone to guide us through the greed and bureaucracy that now rules health care, and Nancy Davis has filled that need. Born of her first-hand struggle with MS, her boundless energy, and epic compassion, this is the book everyone really should read before a health crisis hits you or someone you know."
- Bill Maher

"Nancy Davis has written the definitive book for anyone who wants to take back their power. Inspiring and moving, Nancy Davis has written a wonderful book."
- Jackie Collins

Jill and Heather are very good friends and tremendous supporters of "Lean on Me" and the Race to Erase MS. A special thank you to them for sending in this photo of Heather's License plate!

Jill and Heather are from Phoenix, Arizona

More Photos: DISCO FEVER TO ERASE MS


Jason Davis and Tom Arnold

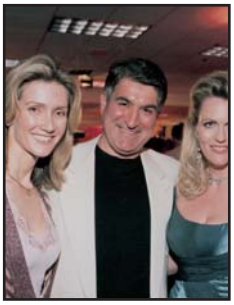

Tommy Hilfiger and Lynn Palmer


Louie Van Amstel, Dimitri, Lisa and Harry Hamlin


Nancy Davis and Sophia Bush


Alexander Davis, Julia Mavris, Jason Davis and Anne Heche


Evelyn and Bob Rickel with Barbara Davis


Francis Najafi and Guest with Nancy Davis


"Lean on Me" Celebrity Sing-a-Long Finale


Brandon Davis and Kelly Osbourne


Sister Sledge


Holly Robinson Peete, Sharon and Kelly Osbourne


Sherry Corday and Guests


Michelle Trachtenberg, Guest and Jason Davis


Cheryl Burke, Tom Arnold, Drew Lachey


Samaire Armstrong


Ralph Bellizzi, Connie Genova, Alberta Utech, Rachel Alvarez


Nancy Davis with Ali and Elizabeth Hilfiger


Dr. Stephen Hauser, Elaine Hauser, Nancy and Barbara Davis


Kristin Cavalleri


Scott Martin and Lauralee Bell Martin


Charles Perez, Laura and Dr. Peter Waldstein


Natalie Cole and Nancy Davis


Debbie and Doran Adhami


Tom Arnold and Nancy Davis


Rebecca Hernreich with Gail and Dennis Flynn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and Nancy Davis


Kool & The Gang and Natalie Cole


Bob Lorsch with Friends


Jo Champa


Brooke Burns


Dr. Adam Kaplin, Rose Barondess
and Guest


Natalie Cole and Paris Hilton


Joe Farrell, Jimmy Lustig
and Thomas Ciampa


Larry Thompson
with Guests


Bubba Lourd and Steve Tisch

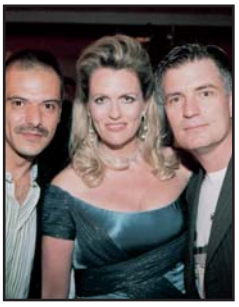

Simon Rex


Chelsea Baker, Ann Cassidy, Nancy Davis,
Tom Arnold and Will Baker


Gregory Itzin and Guest


Drew Lachey


Barbara Davis, Stevie Wonder
and David Foster


Nancy Davis with Freinds


Steven Pal with Guests


Digby Diehl, Nancy Davis and Kay Diehl


Jason Davis with Friends


Tracy and Bryan Elliot

Stacy Keibler

Transverse Myelitis: Symptoms, Causes and Diagnosis

by Joanne Lynn, M.D.

Transverse myelitis (TM) is a neurologic syndrome caused by inflammation of the spinal cord. TM is uncommon but not rare. Conservative estimates of incidence per year vary from 1 to 5 per million population (Jeffery, et.al., 1993). The term myelitis is a nonspecific term for inflammation of the spinal cord; transverse refers to involvement across one level of the spinal cord. It occurs in both adults and children. You may also hear the term myelopathy, which is a more general term for any disorder of the spinal cord.

Clinical Symptoms

TM symptoms develop rapidly over several hours to several weeks. Approximately 45% of patients worsen maximally within 24 hours (Ibid.). The spinal cord carries motor nerve fibers to the limbs and trunk and sensory fibers from the body back to the brain. Inflammation within the spinal cord interrupts these pathways and causes the common presenting symptoms of TM which include limb weakness, sensory disturbance, bowel and bladder dysfunction, back pain and radicular pain (pain in the distribution of a single spinal nerve).

Recovery may be absent, partial or complete and generally begins within 1 to 3 months. Significant recovery is unlikely, if no improvement occurs by 3 months (Feldman, et. al., 1981). Most patients with TM show good to fair recovery. TM is generally a monophasic illness (one-time occurrence); however, a sm 1000 all percentage of patients may suffer a recurrence, especially if there is a predisposing underlying illness.

Causes of Transverse Myelopathy and Myelitis

Transverse myelitis may occur in isolation or in the setting of another illness. When it occurs without apparent underlying cause, it is referred to as idiopathic. Idiopathic transverse myelitis is assumed to be a result of abnormal activation of the immune system against the spinal cord. The cause of idiopathic transverse myelitis is unknown, but most evidence supports an autoimmune process. This means that the patient's own immune system is abnormally stimulated to attack the spinal cord and cause inflammation and tissue damage. Examples of autoimmune diseases which are more common include rheumatoid arthritis, in which the immune system attacks the joints, and multiple sclerosis, in which myelin, the insulating material for nerve cells in the brain, is the target of autoimmune attack.

TM often develops in the setting of viral and bacterial infections, especially those which may be associated with a rash (e.g., rubeola, varicella, variola, rubella, influenza, and mumps). Approximately one third of patients with TM report a febrile illness (flu-like illness with fever) in close temporal relationship to the onset of neurologic symptoms. In some cases, there is evidence that there is a direct invasion and injury to the cord by the infectious agent itself (especially poliomyelitis, herpes zoster, and AIDS). A bacterial abscess can also develop around the spinal cord and injure the cord through compression, bacterial invasion and inflammation.

TM may be a relatively uncommon manifestation of several autoimmune diseases including MS. A definite diagnosis of MS is not given until a patient has had at least two attacks of demyelination (hence, multiple) at two different sites in the central nervous system. The spinal cord is frequently affected in multiple sclerosis and may be the site of involvement of the first attack of MS. This presents the possibility that patients with acute transverse myelitis could later go on to have a second episode of demyelination and receive a diagnosis of MS.

Just what percentage of patients with a first attack of acute transverse myelitis will go on to develop MS is unclear in the medical literature, ranging from 15 to 80%; however, the majority of studies show a low risk. We do know that patients who have abnormal MRI scans of the brain with lesions like those seen in MS are much more likely to go on to develop MS than those who have normal brain MRIs at the time of their myelitis (between 60 and 90% for those with abnormal brain scans, less than 20% for those with normal scans in one study). It is also suggested in the medical literature that patients with "complete" transverse myelitis (which means severe leg paralysis and sensory loss) are less likely to develop MS than those who had a partial or less severe case. The literature also suggests that patients who have abnormal antibodies in their spinal fluid, called oligoclonal bands, are at higher risk to develop MS subsequently.

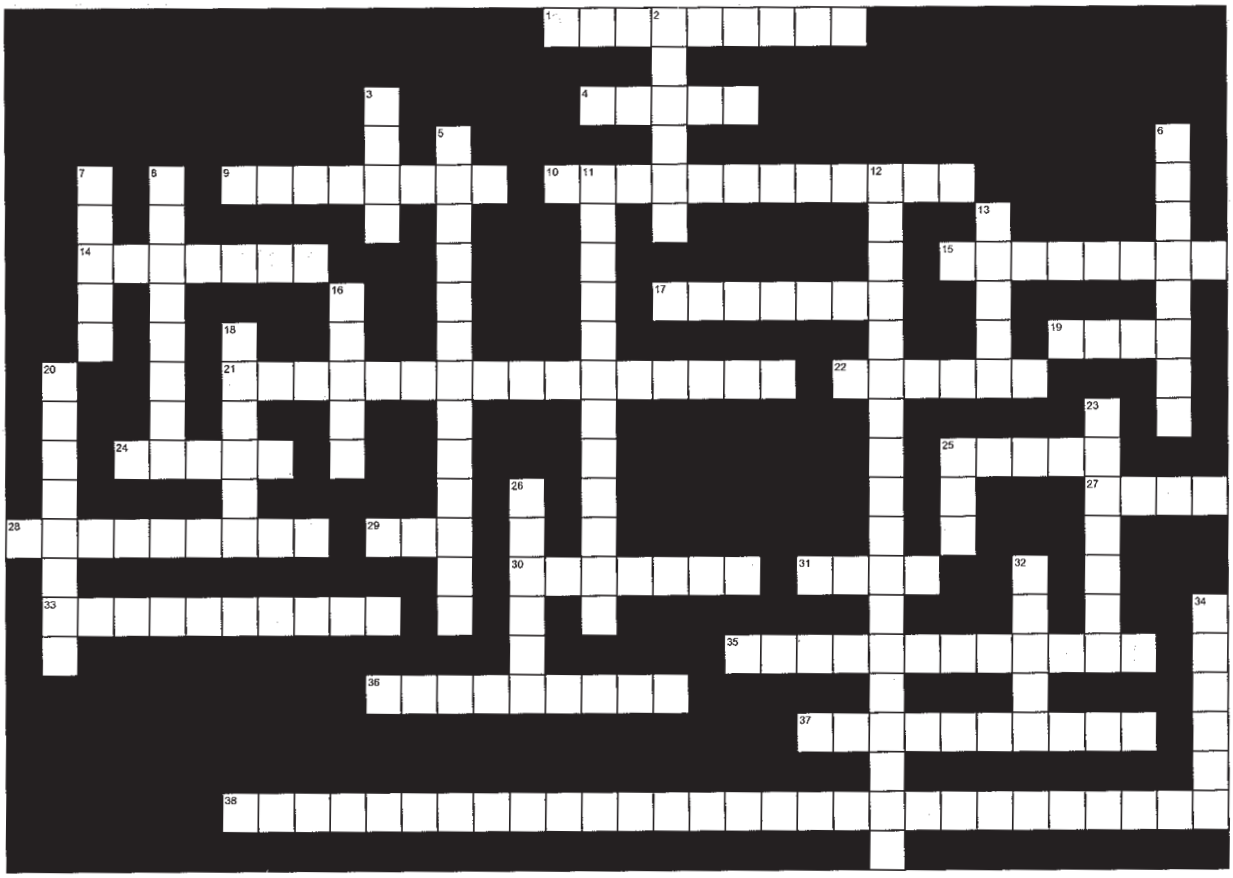
Diagnosis

If the MRI or myelogram shows no mass lesion outside or within the spinal cord, then the patient with spinal cord dysfunction is thought to have transverse myelitis or vascular problems. The MRI can sometimes show an inflammatory lesion within the cord. It is difficult to get to the cause of the inflammation, because biopsy is rarely done on the spinal cord because of the damage this would cause. The physician would next send blood for general bloodwork and studies for SLE and Sjogren's syndrome, HIV infection, vitamin B12 level to rule out deficiency and a test for syphilis. A MRI of the brain is often performed to screen for lesions suggestive of MS. If none of these tests are suggestive of a specific cause, the patient is presumed to have idiopathic transverse myelitis or parainfectious transverse myelitis, if there are other symptoms to suggest an infection.

Excerpt of article by Joanne Lynn, M.D.
Document Date: October 1997

http://www.myelitis.org/tm.htm

CROSSWORD PUZZLE



www.CrosswordWeaver.com

ACROSS

1 NDCWW meeting of all seven centers.
4 The Race to _____ MS.
9 Fashionable 12 year sponsor of The Race to Erase MS.
10 Defense for the body (2 words).
14 Lowers cholesterol and helps with MS in early studies.
15 Theme song at Race events. (3 words).
17 American Idol judge and 13th annual Race presenter.
19 "Unforgettable" Grammy Award winner and 13th annual Race tp Erase MS performerr.
21 Legendary band that performed at the 12th annual Race to Erase MS (3 words).
22 Biogen MS Drug that starts with an A.
24 Manufactured by Ares-Serono, that is similar to Avonex but administered differently.
25 Implicated in the destruction of myelin.
27 Thread-like transmitter of impulses.
28 Scars that form on myelin sheath.
29 Type of X-Ray that can see MS plaque.
30 Genentech drug newly approved.
31 No sensations, for a short period of time.
33 Unable to inhibit the muscle contractions.
35 MS attack.
36 A temporary or permanent disappearance of symptoms.
37 Communication link between the brain and the nerves (2 words).
38 A card that could save your life! (6 words)

DOWN

2 Patchy areas of inflammation and demyelination. Not the type on your teeth!
3 Unpleasant physical sensation
5 Repair or replacement of damaged Myelin.
6 A cell that gives rise to other cells.
7 Center Without _____.
8 Treatment for MS developed in Israel.
11 Protective covering of our nerves (2 words).
12 Spinal Cord inflammation interfering with Nerve function below the level of the inflammation.
13 "Men In Trees" actress who presented at the 13th annual Race.
16 Medicine that gets rid of wrinkles, but might also help to relieve pain and spacticity.
18 Similar to MS, almost exclusively affects the optic nerves and Spinal Cord.
20 Movement that greatly helps to relieve symptoms of MS.
23 What you might be given in a double blind study.
25 Required number of attacks for MS diagnosis.
26 Possible factor in disease causation; chemical, emotional, physical.
32 One of the first nerves to be affected by MS.
34 Comedian and sports genius, and an auctioneer at The Race to Erase MS.

MISSION STATEMENT

The Nancy Davis Foundation for multiple sclerosis is dedicated to the treatment and ultimate cure of MS. Funding research is the core focus of the Foundation and significant strides have been made to find the cause and ultimate cure of this devastating disease.

All funds raised support "The Nancy Davis Center Without Walls", a selected network of the nation's top seven MS research centers. This nationwide collaboration of physicians, scientists and clinicians are on the cutting-edge of innovative research programs and therapeutic approaches to eradicate MS. It is the hope of the Foundation that in addition to combating MS through research in a clinical environment, an increased awareness will be created by educating the public about this mystifying disease.

SAVE THE DATE

The 14th Annual RACE to Erase MS

Friday, April 13, 2007

Hyatt Regency Century Plaza Hotel

MS Roundtable - Open to the Public

Saturday, April 14, 2007
Hyatt Regency Century Plaza Hotel

We thank the following sponsors for their continued dedication and support in our Race to Erase MS!

TOMMY HILFIGER

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