

PROJECT NEWS

Tendon Transfer Clinic at SCVMC

No, a tendon transfer is not the latest dance step, nor is it an anatomic delivery service. A tendon transfer is a surgical procedure that allows certain individuals with spinal cord injury to have increased upper extremity function.

The surgery involves using tendons from stronger muscles and attaching them to tendons from weak or absent muscles in the arm or hand. The thumb joint may also be fused for optimal thumb positioning. If a patient undergoes surgery, then he/she is expected to have his/her arm placed in a cast for 4 weeks during which time he/she will need more assistance for transfers and mobility. After the cast is removed, the person must participate in an intense rehabilitation program, which is usually at least 2-3 therapy sessions per week for 6-8 weeks.

After rehabilitation, the person may expect to improve function in his/her arm/hand, most commonly stronger lateral pinch with the thumb and index finger.

The Upper Extremity/Tendon Transfer Clinic started earlier this year at Santa Clara Valley Medical Center. It is an interdisciplinary clinic in which a hand surgeon, a physiatrist, and an occupational therapist evaluate individuals with cervical spinal cord injury for appropriateness for tendon transfer and other reconstructive surgeries in the upper limbs. Patients may be considered for reconstructive surgery if they have been neurologically stable for at least one year.

Rich Patterson, a recent tendon transfer graduate, had this to say about the procedure, "After 20 years with no change of function, this procedure gives me new capabilities. Grabbing a toothbrush out of a drawer, getting a book off of a shelf, even picking up a piece of popcorn. It is very exciting what this means in terms of what I can do."

For more information contact the SCVMC Rehabilitation Outpatient Clinic at (408) 885-5920.

inter@ct

RRC News
Research Activities
Community Programs

Rehabilitation Research Center for TBI and SCI

Brain Injury Awareness Games

October 20th, 2001, Almaden Lake Park in San Jose, CA

Fun games, tasty food, brain injury resources, and a good cause.

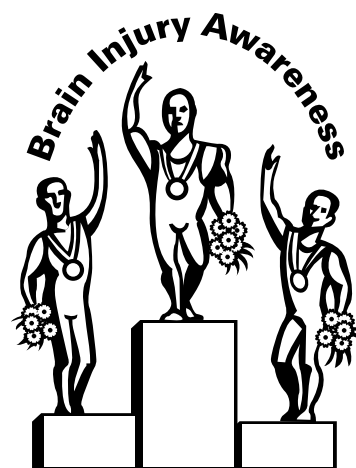
If you missed last year's Brain Injury Awareness Games (formerly the Walk-and-Roll-athon) we hope to see you this year. Participants will have the opportunity to participate in a 5k walk and compete in a number of exciting lawn games. Competitors earn raffle tickets which give you a shot at a number of fun prizes. Music will be provided by Big Fun, and lunch will be served. Funds raised at the Brain Injury Awareness Games go towards expanding public awareness, education, and local services for brain injury.

Some of the money collected from last year's event went towards printing and postage for Talking Heads, a San Jose based newsletter dealing with brain injury issues. Money also went towards expenses for Brain Matters, which provides quarterly community educational events on brain injury related issues. Thanks to everyone who participated or sponsored the event!

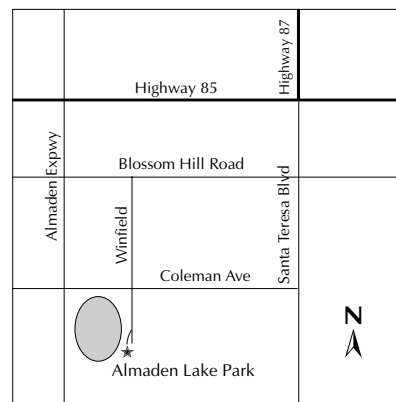
This year money collected will go towards Talking Heads, Brain Matters, Services for Brain Injury (SBI), Head Injury Recreation Leisure Network (HIRLN), and the Brain Injury Association of California (BIAC).

If you are interested in attending this year's Games, please call our toll free number to RSVP so we can get an estimate of how many to expect (and how many t-shirts to make). Please call 1-800-352-1956 extension 18. The big event takes place October 20, 10:30 a.m.-1:30 p.m. at Lake Almaden Park.

Brain Injury Awareness Games updates are also available on the Brain Matters website at <www.tbimatters.org>



GAMES and WALK



*Almaden Lake Park, San Jose
located on corners of Winfield Blvd. &
Coleman Ave.*

The COMBI

Information on Outcome Measures on the Internet

Do acronyms like DRS, FIM, CHIEF, and CHART confuse or befuddle you? Well, no longer. The RRC coordinates a resource that helps detail and explain pesky outcome and assessment measures.

The Center for Outcome Measurement in Brain Injury (COMBI) is an online resource center cataloguing information on popular brain injury outcome and assessment scales. The COMBI is funded by the National Institute on Disability and Rehabilitation Research (NIDRR) and is a collaborative project of ten TBI Model System Projects, coordinated by the RRC at Santa Clara Valley Medical Center.

Currently, the COMBI contains information on 20 outcome or assessment scales. Materials available include scale syllabi, administration and scoring guidelines, training and testing materials, information on scale properties, references, scale forums, and frequently asked questions (FAQs). Rating forms for most of the measures are also available for downloading. COMBI users have the advantage of instant access to the materials they want. Information on the COMBI is available free of charge.

The COMBI also has a biannual online newsletter called Outcome Oriented. The newsletter gives updates and overviews of new measures and covers measurement issues pertinent to brain injury and to the COMBI.

So, if you are a professional that needs more information on a specific measure, or are just plain curious about brain injury outcome measurement, give the COMBI website a try.

The COMBI and Outcome Oriented are at www.tbims.org/combi

For more information email Jerry Wright at jwright@tbi-sci.org

STAFF SPOTLIGHT

The Counselor is In...

Dan Mayclin, Ph.D.



Dan Mayclin

Meet our resident psychologist and counselor, **Dan Mayclin**. Dan has been with the RRC since 1997 when he coordinated our TBI Peer Support Services (Dan wanted to recognize our TBI Peer Supporters as a great group of fun, caring individuals). Dan currently works at the RRC coordinating our Family Support Group, helping the families of individuals who have had a spinal cord injury. Dr. Mayclin also conducts the follow-up neuropsychological assessments done for the traumatic brain injury national database. Dan is also currently working with **Rich Patterson**, RRC Peer Support Coordinator, to develop a series of videos to educate families and others about what life is like after spinal cord injury rehabilitation.

On the importance of peer support Dan said, "Peer support is a much needed service. The people and families that have experienced brain or spinal cord injuries go through a significant life changing event, very much outside of their realm of experience and understanding. Peer Supporters let them know that they are not alone, and share support and coping strategies".

On neuropsychological assessments, Dan stated, "These tests allow for understanding of what has happened. If people can understand the deficits they don't feel like they are crazy."

Dan certainly has a wealth of experience. He started work in Rehab in 1968 as a Rehab Counselor and transitioned to being a Psychologist working at Santa Clara Valley Medical Center in 1974. His focus has been working with individuals with disabilities, primarily those with brain or spinal cord injuries. Dan spent 18 months in Ireland doing training and management consulting, helping to develop their national SCI Peer Support Program (and developing and administering a 250 hour training program!) Currently Dr. Mayclin maintains private practices in Los Gatos and Santa Cruz.

Dan's experience with spinal cord injury is on a personal level. He was injured 42 years ago in a hunting accident and has been dealing with spinal cord issues ever since. "I bring as much of that experience to my counseling, and other jobs, as appropriate".

Dan's personal interests include genealogy and most things Irish. "Genealogy is fascinating because it gives you a window into another era. Not just dates when a person was born and died, but what their life was like and how they got by".

Thanks Dan for all you do for the RRC (and for the "historical" perspective)!

*inter@ct is brought to you by NIDRR grants H133A970018 and H133000007. However, the contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal government. Address inquiries to **Jerry Wright**, Editor, Design & Production. Phone (408) 295-9896 ext. 20. Email: jwright@tbi-sci.org*

SUPPORT CORNER

TRAUMATIC BRAIN INJURY (TBI) SUPPORT GROUPS

- **Mild Brain Injury (MBI) Group**
For individuals in the community with brain injury, and friends and family. Meets the second and fourth Tuesday of each month at 7 p.m. at the Cypress Senior Center, 403 So. Cypress Ave., San Jose. Contact **Richard Patterson** at (408) 295-9896, x12.
- **Very Important Patient (VIP) Group**
Includes inpatients, outpatients, individuals in the community with brain injury, and friends and family. Meets the fourth Wednesday of each month at 7 p.m. at Santa Clara Valley Medical Center, 2nd Center Day Room (2nd Floor). Contact **Richard Patterson** at (408) 295-9896, x12.

SPINAL CORD INJURY (SCI) SUPPORT GROUPS

- **SCI Support Group**
Includes individuals in the community with SCI, and friends and family. Meets the third Thursday of each month at 7 p.m. at the Cypress Senior Center. Contact **Richard Patterson**, (408) 295-9896, x12.
- **SCI Women's Peer Support Group**
Includes women in the community with SCI. Meets on the fourth Friday of the month from 12:00 p.m. to 2 p.m. Contact **Janie Whiteford**, (408) 295-9896, x42, for the location.
- **Family & Caregiver Support Group**
Includes family, caregivers and friends. Meets every other Thursday at 6:30 p.m. at Santa Clara Valley Medical Center, Rehabilitation Conference Room. Contact **Dan Mayclin** at (408) 860-7883 (pager).

RESEARCH SUMMARY

SCI Regeneration and Curative Research

Ten years ago, there was very little hope of repairing the damaged spinal cord and restoring any sort of function following a spinal cord injury. Over the past few years, with several high profile individuals sustaining spinal cord injuries, there has been a lot of attention given to finding a cure for SCI. Many groups representing individuals with SCI have lobbied hard for increased funding for curative research, and as a result more federal monies have been dedicated to this area of research.

Progress in regeneration and repair of the damaged cord has been traditionally slow, mostly due to the fact that the spinal cord is a highly complex component of the central nervous system (CNS). The tissue within the CNS does not have the capacity to repair itself, as many other types of tissue in the body can. Research has focused not only on repair of the cells initially damaged by the trauma to the cord, but also on preventing secondary cell damage caused by the swelling and loss of blood flow and oxygen that occurs after initial injury.

One of the areas SCI research focuses on is keeping cells at the site of initial spinal cord injury from being destroyed. Drugs such as the steroid methylprednisolone, which is given in the period immediately following the injury, help by reducing the swelling at the site of injury. Sygen, (also known as GM-1), is another medication used to decrease the destruction of cells, thus improving the potential for regeneration at the area of injury.

Nerve cells that have not been completely destroyed in the aftermath of the injury may still be rendered useless by a process that promotes the destruction of the myelin sheath. Myelin provides insulation for cells, and enables the transmission of electrical impulses. One drug, known as 4-AP has been shown to increase the cell's ability to conduct electricity and increases the chance that nerve



How close is curative research?

impulses will travel through the injured area. Schwann cells are also a potential source for remyelination. Scientists at The Miami Project are studying the role of Schwann cells, which are known to be the source of myelin in the other areas of the body, in promoting cellular regeneration in the spinal cord.

Other aspects of SCI research are concerned with the replacement and/or repair of damaged tissue and stimulating damaged nerves to regenerate. One area of focus is on the transplantation of new cells into the injured area of the spinal cord at the site of injury. These cells may be able to stimulate regeneration of those cells in the damaged spinal cord by making proteins that promote nerve growth or other mechanisms. Fetal nerve tissue is one type of tissue used for transplantation, and has been shown to give rise to new nerve cells. Stem cells, which are immature, undifferentiated cells that are capable of reproducing other types of cells found in the body, including those found in the spinal cord, are also being used.

Another area of SCI research, recently given heightened attention in the media, focuses on the body's immune system response. Recently a

Continued on Page 4

SCI Regeneration and Curative Research (cont)

a company named Proneuron, located in Israel, has been involved in research involving activated immune cells (T-cells and white blood cells). These cells are injected into the damaged area of the spinal cord in the hopes of promoting the regrowth of cells, and also of protecting the cells in the cord from further damage that takes place after injury.

Due to the highly complex nature of the spinal cord, there are still many obstacles in regeneration research. However, the good news is that progress is being made in this arena. Funding for this type of research is increasing, primarily due to the hard work and dedication of many individuals with SCI and their families.

Below is a listing of several of the organizations involved in SCI research.

Center for SCI Research

Craig Hospital
303/761-5281
3425 S. Clarkson Street
Englewood, CO 80110-2899
Website: <www.craig-hospital.org>

Christopher Reeve Paralysis Foundation

800/225-0292
973/379-2690
500 Morris Ave.
Springfield, NJ 07081
Website: <paralysis.apacure.org/crf>

Karolinska Institute

46-8-728 64 00
SE-171-77
Stockholm, Sweden
Website: <www.info.ki.se>

The Miami Project to Cure Paralysis

800/782-6387
305/243-6001
P.O. Box 106960, Mail Locator R-48
Miami, FL 33101
Website:
<www.miamiproject.miami.edu>

Proneuron Biotechnologies, Ltd.

+972 8 940-9550
FAX: +972 8 940-9560
P.O. Box 277, Ness-Ziona
74101, Israel
Website: <www.proneuron.com>

Reeve Irvine Research Center

949/824-1379
University of California, Irvine
252 Irvine Hall
Irvine, CA 92697-1379
Website: <www.reeve.uci.edu>

Spinal Cord Research Center

University of Manitoba
436 Basic Sciences Medical Building
730 William Ave.
Winnipeg, Manitoba
R3E 3J7
Website: <www.scrc.umanitoba.ca>

Spinal Cord Society

218/739-5252
Wendell Rd.
Fergus Falls, MN 56537
Website:
<<http://users.aol.com/scsweb>>

Call for Research Participants

Two spinal cord injury related studies are recruiting for volunteers at SCVMC. These studies are not curative or regeneration oriented.

The first study investigates thyroid function and testosterone levels and how they affect feelings of well being in women with spinal cord injury. We know that in able-bodied females that there are significant interrelationships between sexuality, depression, testosterone levels, and thyroid function and that, in males with SCI, there are changes in thyroid function and testosterone levels. However, there have been no studies that examine the relationship between depression, quality of life, and sexuality with decreased levels of testosterone and thyroid function in females with SCI.

The second study will investigate a potential cause of late onset neurological decline and weakness called ulnar entrapment. The study will see if there is an increase in the incidence of ulnar nerve entrapment in individuals with SCI who do activities that stress the ulnar nerve at the elbow such as: leaning on the elbow while sitting at rest, to answer phones, and while driving. The study hopes to identify successful modifications for equipment and activities.

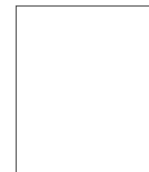
For more information on these studies, please call (408) 885-3218.

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