Cyborg Spinal Implant Can Help Paralyzed Walk Again

Paralyzed patients have been given new hope of recovery after rats with severe spinal injuries walked again through a “groundbreaking” new cyborg-style implant. In technology which could have come straight out of a science fiction novel or Hollywood movie. French scientists have created a thin prosthetic ribbon, embedded with electrodes, which lies along the spinal cord and delivers electrical impulses and drugs. The prosthetic, described by British experts as ‘quite remarkable’, is soft enough to bend with tissue surround the backbone to avoid discomfort. Paralyzed rats who were fitted with the implant were able to walk on their own again after just a few weeks of training. Researchers at the Ecole Polytechnique Federal de Lausanne are hoping to move to clinical trials in humans soon. They believe that a device could last 10 years in humans before needing to be replaced. The implant, called ‘e-dura’, is so effective because it mimics the soft tissue around the spine known as the dura mater — so that the body does not reject its presence. “Our e-dura implants can remain for a long period of time on spinal cord or cortex,” said Professor Stephanie Lacour. “This opens up new therapeutic possibilities for patients suffering from neurological trauma or disorders particularly individuals who have become paralyzed following spinal cord injury.” Previous experiments had shown that chemicals and electrodes implanted in the spine could take on the role of the brain and stimulate nerves, causing the rats’ legs to move involuntarily when they were placed on a treadmill. But this is the first study to show a simple gadget can help rats walk again and be tolerated by the body. Scientists have struggled to find a device which will sit next to the spine or brain because both are surrounded by a protective envelope of tissue which the hard surface of implants can rub against, causing inflammation and scar tissue. However the new gadget is flexible and stretchy enough that it can be placed directly onto the spinal cord. It closely imitates the mechanical properties of living tissue, and can simultaneously deliver electric impulses and drugs which activate cells. The implant is made of silicon and covered with gold electric conducting track that can be pulsed and stretched. Implants have been tested for spinal cord injuries but could eventually be used for Parkinson’s disease and epilepsy. (Article fit to page)
A PILL FOR GULF WAR SYNDROME?

More than 20 years after Operation Desert Storm, at least 175,000 U.S. military veterans claim a broad range of mysterious symptoms known as Gulf War Syndrome. Doctors have voiced skepticism about their complaints, which include fatigue, digestive distress and recall problems. But a UC San Diego physician has long taken a different view, and now her research is focusing on possible treatment in the form of a simple, over-the-counter supplement. Dr. Beatrice Golomb, a professor and researcher with the University’s medical school recently published a study that showed some success against the syndrome with a high-quality brand coenzyme Q10. It is not a cure, but by boosting cell energy and anti-oxidation, it does mitigate symptoms. The list of health complaints of Gulf War Syndrome includes lethargy, muscle pain, weakness, gastrointestinal problems, skin maladies, and decrease cognitive function including memory difficulties. The trouble for Gulf War veterans is that symptoms often defy easy explanations. Dr. Jennifer Javors, San Diego VA’s point person for a national Gulf War illness registry, is in the camp of physicians who believe that post-traumatic stress disorder—the body and mind’s response to extreme stress of combat, may be responsible for many of the Gulf War ailments. She recommends veterans with those symptoms come in and get registered, in part because that will lead to getting VA care for whatever afflicts them. Nearly 147,000 people have done so nationally, including 800 in the San Diego Region. Dr. Golomb feels the answer may be found in the mitochondria, sometimes called the powerhouse of the body’s cells. They generate the energy that cells need to function. One source could have been pesticides that the U.S. military used around camps there, another possibility is the pills given to troops to protect them from a nerve agent held by then Iraqi President Saddam Hussein. In a prior study imaging technology was used to confirm damage to mitochondria in a small amount of veterans. In her latest study published Nov 1, 2014 in the journal Neural Computation, test the effect of coenzyme Q10 supplements. The fat-soluble antioxidant is naturally made by the body to support basic cell functions. In the study 46 veterans received a placebo, or differing doses of a supplement on a daily basis. Golomb’s group used PharmaNord, a version of coenzyme Q10. Result: 80% who got a 100 mg dose of the supplement showed improved physical function. The degree of improvement correlated to how much coenzyme Q10 levels in the blood increased. The downside: sleeplessness. Coenzyme charges up cell activity to the point that it can keep people awake if taken near bedtime. Golomb is collaborating with other Gulf War researchers to submit proposal to replicate this study’s findings on a larger scale, at several sites across the country. The study may not only help veteran but civilians as well. “It may well be that like with Legionnaire’s Disease, which started in a group from the American Legion it’s not only Legionnaires who are affected.” 12/02/2014 U-T San Diego article by Jeanette Steele.

CONCUSSIONS

A study of active duty U.S. Marines who suffered a recent or previous concussion(s) examined whether persistent post-concussive symptoms (PPCS) and lingering effects on cognitive function are due to concussion-related brain trauma or emotional distress. The results are different for a recent concussion compared to a history of multiple concussions, according to the study published in Journal of Neurotrauma, a peer-reviewed journal from Mary Ann Liebert, Inc., publishers. The article is available Open Access on the Journal of Neurotrauma. James Spira, U.S. Department of Veterans Affairs and University of Hawaii (Honolulu, HI), Corinna Lathan, AnthroTronix, Inc. (Silver Spring, MD), Joseph Bleiberg, Walter Reed National Military Medical Center (Bethesda, MD), and Jack Tsao, U.S. Navy Bureau of Medicine and Surgery (Falls Church, VA), assessed the effects of concussion on persistent symptoms, independent of deployment history, combat exposure, and symptoms of post-traumatic stress disorder and depression. They describe the results for persons with a recent concussion or who had ever had a concussion to those who had more than one lifetime concussion in the article "The Impact of Multiple Concussions on Emotional Distress, Post-Concussive Symptoms, and Neurocognitive Functioning in Active Duty United States Marines Independent of Combat Exposure or Emotional Distress". John T. Povlishock, PhD, Editor-in-Chief of Journal of Neurotrauma and Professor, Medical College of Virginia Campus of Virginia Commonwealth University, Richmond, notes that "This study by Spira and colleagues represents an important contribution to our understanding of the negative impact of
The Defense POW/MIA Office announced the identification of remains belonging to Army CPL. Francis D Knobel, 20 of La Crosse, WI., was assigned to Headquarters Company, 3rd Battalion, 31st Infantry Regiment, 7th Infantry Division, when he was lost Dec 12, 1950 in North Korea. He will be buried with full military honors on a date and location yet to be determined.

WISCONSIN MIA SOLDIERS’ REMAINS COME BACK FROM KOREA, 64 YEARS LATER

CONCUSSIONS CON’T

CONTINUED FROM PAGE 2 of multiple concussions in a relatively large military population sustaining both deployment and non-deployment related trauma. The consistent observation that multiple concussive injuries are associated with worse emotional and post-concussive symptoms is an extremely important finding that must guide our evaluation of individuals, in both the military and civilian settings, who have sustained multiple concussive injuries. While the authors acknowledge some limitations of the current work and the need for future research to follow a similar cohort in terms of the time course and causality of the symptoms associated with concussion, overall this well done study adds significantly to our increased understanding of the adverse consequences of repetitive concussive/mild traumatic brain injury." article by: Medical Newsletter Today.

OTHER THAN HONORABLE DISCHARGES

The amendment to the National Defense Authorization Act mandates an investigation of whether the military has improperly used other than honorable discharges to rid the services of wounded troops who commit minor offenses.

The amendment, written by U.S. Sen. Michael Bennet (D-CO) follows a Pulitzer Prize-winning 2013 Gazette investigation that found the Army used disciplinary discharges to part with soldiers who were later denied health care benefits that might help them recover from combat wounds and mental illness. "We have heard from veterans in Colorado who believe that some service members are receiving less than honorable discharges for behavior that could be related to mental trauma from combat," Bennet said 15 DEC in a statement. "Clearly, we can't have a system that punishes service members for injuries sustained in service and this bill will help us understand whether this is happening and what we need to do to change it."

Under the measure, the Government Accountability Office will investigate the discharges. Specifically, the report will show whether the military unfairly discharges troops for minor misconduct. It will also examine whether officers are trained to balance misconduct against war-caused mental illness and other factors. Other areas of inquiry include how often misconduct discharges can be related to troops with post-traumatic stress and whether troops are counseled on veterans benefits before agreeing to a dishonorable discharge. Bennet said the questions came up in veterans panels after The Gazette's investigation. "Other than Honorable" showed that an increasing number of soldiers, including wounded combat veterans, were being kicked out of the service for misconduct, often with no benefits, as the Army downsizes after more than a decade of war.

In May 2013, The Gazette published the series in print and on gazette.com. It used Army data to show that the number of soldiers being discharged for misconduct annually had surged to its highest level since 2009 at posts with the most combat troops. The investigation found that several factors were related to the discharges, including a mandatory troop reduction; an overwhelmed medical discharge process; and policies that didn't account for behavior resulting from the mental wounds of war. [Source: The Gazette | Tom Roeder | Dec. 16, 2014 ++]
WI Receives Federal Grant for Homeless Vets

MADISON – The Departments of Health Services (DHS) and Veterans Affairs (WDVA) today announced that Wisconsin has received a $1.2 million federal grant to assist homeless veterans living in northern Wisconsin who have behavioral health needs by referring them to needed services and housing. The grant from the federal Substance Abuse and Mental Health Services Administration will provide $400,000 annually for the next three years to fund the efforts of the Veterans Outreach and Recovery Program. This new program is a joint project of DHS and WDVA.

“Veterans who live in rural areas are both more likely to experience behavioral health needs and are less likely to have ready access to behavioral health resources,” said Department of Health Services Secretary Kitty Rhoades. “The Veterans Outreach and Recovery Program takes a resourceful approach to better address the needs of homeless veterans battling a mental illness and substance use disorder in a large, under-served part of Wisconsin.”

“This partnership with the Department of Health Services will allow the WDVA to provide more effective outreach to homeless veterans in rural and sparsely populated areas as it relates to behavioral health and substance programs and services directly to our veterans and their families.”

According to the Wisconsin Homeless Management Information System, more than half of Wisconsin’s homeless veterans live in the northern part of the state. In their lifetime, analysts estimate 50 percent of these individuals will have a mental illness and 70 percent will have a substance use disorder.

The Veterans Outreach and Recovery Program divides 47 counties in the northern two-thirds of Wisconsin into four regions, with an outreach and recovery specialist assigned to each area. The outreach and recovery specialist, who will be a veteran, will work with behavioral health in each county, and homeless and veterans groups to encourage referrals of veterans who will be screened for the program. Once enrolled in the program, the outreach and recovery specialists, supported by a clinical coordinator, will use evidence-based approaches to work with the veterans who are homeless to ensure they have stable housing, connect them to proper treatment, follow-up to ensure that the treatment is continual and effective, and provide the appropriate recovery supports for the veteran to be successful. The program is expected to begin serving veterans in January 2015.

Operation Badger Base

2015 Commemorates the 50th Anniversary of the Vietnam War. The Operation Badger Base Commemoration will honor all US Military veterans from World War II to present. Currently, living war veterans range in age from the 100’s to late teens or early 20’s. Each era of veterans need our thank you, support, and recognition.

In particular, help us honor the service of nearly 1,200,000 military personnel that served in the Vietnam War between 1965 and 1975. On August 6-9, 2015, an event marking the 50th anniversary of the war will be held at the Dane County Memorial Coliseum, Madison, Wisconsin. The four day event will feature Madison’s first installation of the Moving Wall, a 1/2 scale replica of the Vietnam Wall Memorial in Washington, DC, an American Legion motorcycle escort of the wall as it travels to Madison, live entertainment, and Veteran information.

http://operationbadgerbase.com/

CAPSELL SERVICES WILL ONCE AGAIN OFFER TAX SERVICES TO LOW INCOME CALL 800-660-5430 AFTER JAN 26, 2015 TO SEE IF YOU QUALIFY FOR FREE OR REDUCED ASSISTANCE WITH FILING YOUR TAXES.
Specially Adapted Housing For Veterans

Are you a Veteran with a severe service-connected disability that affects your mobility? Do you know someone who is? The Department of Veterans Affairs (VA) administers the Specially Adapted Housing program, designed to help severely disabled Veterans and Servicemembers purchase or construct an adapted home, or modify an existing home to accommodate a disability. Two grant programs exist: the Specially Adapted Housing (SAH) and the Special Housing Adaptation (SHA) grant.

The SAH grant is designed to help disabled Veterans and Servicemembers by providing a barrier-free living environment, such as a wheelchair accessible home, that affords Veterans a level of independent living they may not otherwise enjoy. Veterans and Servicemembers with specific service-connected disabilities (including loss/loss of use of both lower extremities) may be entitled to a grant for the purpose of constructing or modifying a home to meet their adaptive needs, up to the current maximum of $70,465.

THE SHA grant can be used to increase the mobility of eligible Veteran and Servicemembers throughout their residences. Veteran and Servicemembers with specific service-connected disabilities (including severe visual impairment or loss/loss of use of both hands) may be entitled to this type of grant, up to the current maximum of $14,093.

For those who do not yet own a home, a temporary grant may be available to SAH/SHA eligible Veterans and Servicemembers who are or will be temporarily residing in a home owned by a family member. The maximum amount available to adapt a family member’s home for the SAH grant is $30,934 and for the SHA grant is $5,523. VA staff located nationwide to assist individuals in applying for and receiving these grants. You can find more detailed information about qualifying disabilities here: http://benefits.va.gov/homeloan/adaptedhousing.asp and you can find contact information for and SAH Agent in your area here: Http://www.benefits.va.gov/HOMELOANS/contact_agents.asp

Each Veteran’s housing/living needs are as unique as their physical disabilities. The specially Adapted Housing program provided hand-on, personalized, customized service to severely disabled Veterans seeing home adaptations. Other quick reference information can be found on our SAH graphic at: http://www.benefits.va.gov/BENEFITS/infographics/special_adaptive_housing.htm#sthash.fO5MRI0b.dpbs.

Alzheimers and Music

As he plays the Christian hymn, "How Great Thou Art," Mike Knutson has been through a lot with his harmonica. "Everybody knows him for that, he loves to play the harmonica, and entertain the troops," said Barb Knutson, Mike's daughter. Mike's family says he taught himself how to play the harmonica at a young age. The instrument has taken Mike from World War Two, to fatherhood, and now-- his golden years. The retired soldier has always had a passion for music. Mike's memory may be fading, but when he listens to some of his favorite songs, some of those memories-- come back. "At this point in time-- he's able to sometimes recognize me," said Barb, "he might say daughter, just yesterday-- he called me by my first name." Mike has Advancing Alzheimer's. "It could be an hour or so later, and he'd look at me and really wonder who I am-- you just never know," said Barb.

Regardless of his condition, Barb says her father still loves to sing. "Ever since we were children, we used to sing together as a family," said Barb. "You Are My Sunshine," was one of the songs they always sang together, the song is just one of many from Mike's play list in the Music and Memory Program at the Wisconsin Veteran's Home in Union Grove, Racine County. "When we put his headphones on and play his music, he instantly perks up," said Kelly Mack, a recreational therapy assistant at the Wisconsin Veteran's Home. "CONTINUED PAGE 7"
Air Force Reserve members who flew C-123 aircraft after they were used for spraying Agent Orange in Vietnam were exposed to the toxic herbicide and may be at risk for developing related diseases, according to a federal study released Friday. An Institute of Medicine scientific panel comprised of public health experts stated "with confidence" that some of the 1,500 to 2,100 Air Force Reserve personnel who flew on C-123s after the war were exposed to chemical levels that exceed health guidelines for workers. Subsequently, they may face increased risk for developing illnesses associated with exposure to the components of Agent Orange, according to the study.

The findings — from a group led by Harvard Public Health expert Robert Herrick — are a hard-fought victory for a small group of former service members who have lobbied for years to be included among those presumed to be exposed to Agent Orange as a result of their military service. Led by retired Air Force Maj. Wes Carter, the members of the C-123 Veterans Association have pushed the Veterans Affairs Department to recognize illnesses they’ve developed and say are related to exposure. But VA consistently has maintained that trace amounts of dioxin on the metal surfaces in the aircraft, which were stripped of their spraying apparatus after the war, would not pose a threat to troops because it is not "biologically available for skin absorption or inhalation."

See complete story at:

FRONT LINE BRAIN THERMOMETER

Army medics will soon use what's been dubbed a "brain thermometer": a mobile phone application that can, within minutes, provide health professionals data to help diagnose and measure a soldier's injuries. The Defense Automated Neurobehavioral Assessment, produced by AnthroTronix (DANA), includes five-, 20- and 45-minute batteries of both neurocognitive tests and psychological survey questions. DANA will not only help a health professional diagnose traumatic brain injury, but also provide valuable information that can help isolate depression, post-traumatic stress, and other neurocognitive issues, according to AnthroTronix CEO Corinna Lathan. The test, similar to a video game, consists of various on-screen exercises during which a soldier's speed and accuracy are scored. Ultimately, a medical provider — potentially in theater — would analyze the post-injury test in concert with the pre-deployment baseline tests. "In essence, measuring reaction time is like taking the temperature of the brain," Lathan said in an Army news release. "It's a vital part of the data that any health professional needs to evaluate his patient." The Army, this fall, received Food and Drug Administration clearance, said Lt. Col. Chessley Atchison, the program manager for the Technology Enabled Capability Demonstration: Brain in Combat portfolio of the Combat Casualty Care Research Program. That clearance means it's safe to use; the FDA did not test its clinical usefulness. It also means providers can use the tool in the field, though the Army is not pushing it on clinicians at this point. The tool has tested as reliable and durable in a variety of harsh combat environments in a peer-reviewed study in the Military Medicine journal, Lathan said. A Johns Hopkins researcher found in another study that its results correlated highly with the mini-mental state examination, regarded as a highly reliable cognitive impairment assessment tool in clinical and research settings. The new tool will continue to be vetted for battlefield use, the Army reports, and work is underway to use it with tablets in addition to smartphones. "Once we get it right, we're going to put it fairly far forward in the field," Atchison said. There are also ongoing studies of the tool regarding its capacity to help assess concussions with the athletic department at the University of Wisconsin and PTSD at the Department of Veterans Affairs. The tool will not replace the mandated pencil-and-paper Military Acute Concussion Evaluation as an in-theater assessment, nor the computer-based Automated Neuropsychological Assessment Metric used for a pre-deployment baselines. Atchison said that would be a matter of policy and doctrine changes outside the scope of the joint project. But clinicians can used DANA now to supplement that information. [Source: ArmyTimes | Kyle Jahner} Jan. 03, 2015 ++]

Alzheimers Con’t

Continued from Page 5……

Mike is helping researchers at UW Milwaukee find out if music can help dementia patients bring back personal memories. "People seem to really have maintained their musical memories and their musical abilities even after the dementia has progressed," said Prof. Jung Kwak, who leads the study. Prof. Kwak is working with patients from 10 retirement homes in Southeast Wisconsin to gather data. "The response from the staff and family members has been very positive," said Prof. Kwak.

The study is still in progress, but Mike's family says, it's helping. "I think the more opportunities he has to be connected to music, the more awake he is, and the more aware he is of what is going on all around him," said Barb. Researchers are also studying if music helps reduce each patient's use of anti-depressants and anti-anxiety medication.

The Music and Memory program will expand to 200 retirement homes next year.

Mike Knutson part of a Music and Memory Experimental Program is receiving music therapy in hopes of helping him remember despite advanced Alzheimer's disease.
Mental Help

Jennifer Grubba 608-264-5342 of the Madison Vet Center will be filling in the counseling position that comes to Waushara County Courthouse by previously arranged appointments, 2nd Wednesday of the month. Call for appointment. Free Counseling to combat veterans and sexual trauma veterans. 5 sessions to non-combat veterans. Marriage counseling, also.

Financial Help

Jamie Kolpien from Supportive Service for Veterans Families (SSVF) will meet with veterans facing eviction from rentals or post foreclosures, every 4th Wednesday at the North Annex 230 W. Park St. Wautoma, WI between 10 am to 3 pm. For an appointment call 866-823-8387

There is a financial limit to this help. You may call her to find out more details.

PTSD Group

Interested in forming a PTSD support group? Jennifer Grubba of the Madison Vet Center (608)264-5342 would like to help form a group for Veterans with PTSD in Waushara County. The group would most likely meet in Waushara County. Please call her if you are interested in being part of a support group. And willing to join with other veterans in support of each other. No cost!!!