

NEUROTHERAPY RESEARCH AND DEVELOPMENT ASSOCIATION INC



**A NOT-FOR-PROFIT ENTITY DEDICATED TO HELPING PEOPLE REGAIN
FUNCTION THROUGH RESEARCH-BASED, NON-DRUG,
NONINVASIVE TREATMENTS FOR:**

COGNITIVE ISSUES

TRAUMATIC BRAIN INJURY
LEARNING PROBLEMS
MEMORY PROBLEMS

TRAUMA AFTERMATH

PAIN
HEADACHE
INSOMNIA
FIBROMYALGIA
POST-TRAUMATIC STRESS DISORDER

MOOD PROBLEMS

DEPRESSION
ANXIETY

THE PEOPLE WE HELP

Results? What does EEG Stimulation Neurofeedback (EEG-ST) do that other therapies haven't done?

The NCW NIH-funded study for Traumatic Brain Injury (TBI) documented positive change in people who were chosen for the study because no further change was thought to be possible¹.

Over two-thirds of clients with TBI, PTSD, and Fibromyalgia treated at NCW have data showing significant symptom reduction.



Pamela, 48

2001 Fibromyalgia Study

"I feel like I've been given my whole life back....I haven't even thought of myself as having fibromyalgia in a really long time....I'm doing things I hadn't been able to do in years."



Sophia, 71

Fibromyalgia

"The combination of the treatment programs that I have received at NCW is awesome... As a result of treatment at NCW, I feel better than I have in years."



Jim, 42

Iraq War Veteran • TBI & PTSD

"Before I was on the road to shutting down. Now, after five treatments, I can't believe how calm I am. I'm coming back to reality."

¹ Schoenberger, N., Shiflett, S., Esty, M.L., Ochs, L., Matheis, R., (2001). Flexyx Neurotherapy System in the treatment of traumatic brain injury: An initial evaluation. *Journal of Head Trauma Rehabilitation*. Vol. 16(3).

Examples of positive symptom change:

- Return of energy
- Restored functional depth of vision after trauma
- Enhanced mood – less depression and anxiety
- Clarity and cognitive quickness restored
- Anxiety and panic reduced
- Triggering events associated with traumatic flashbacks no longer produce panic
- Return of short-term and long-term memory
- Reduced fatigue leading to a more active life
- Pain reduced



Billy, 5

Autism

Mom says: “Tantrums are ... extremely rare and instead of screaming when he sees family and friends and running away (as he did 6 months ago), he greets them with hugs and kisses. ... Everyone who knows him has been struck by the transformation in him since last fall.”



Matthew, 10

Attention Deficit Disorder

Mom says: “This school year I have not received one note home about his lack of attention or disturbance of classmates.”

Cynthia, 40

TBI & Myofascial pain

In a letter to insurance company during treatment at NCW: “I was able to significantly reduce pain medication and completely eliminate all anti-anxiety medications.”



Amanda, 16

cancer survivor/TBI

Mom says: “After years of being told nothing would ever change by doctors, things started changing immediately with her first treatment. Her brain no longer shuts down every time she gets over stimulated. Thanks to NCW, Amanda has regained her ability to learn and interact with the world around her.”

National Veterans Foundation Releases Report: "Iraq and Afghanistan Veterans in Crisis"
Los Angeles, Calif. – February 28, 2008 - A study released today by the National Veterans Foundation reports that the United States Government is shortchanging veterans benefits to the military veterans that have served in Iraq and Afghanistan.

The report, "Iraq and Afghanistan Veterans in Crisis," compares the benefits received by WW II, Korean, and Vietnam War veterans with those of Iraq and Afghanistan veterans who have served in the middle east. The report states that the United States Government is shortchanging veterans benefits to the military veterans that have served in Iraq and Afghanistan.

OPERATION COMING HOME

Repeated Iraq deployments raise mental health risks for soldiers

By Peter Spiegel,
Los Angeles Times Staff Writer

WASHINGTON -- More than a quarter of high-ranking enlisted soldiers showed signs of having mental health problems, a new study says.

AS OUR BRAVE MEN AND WOMEN return from war, many are returning with post-traumatic stress disorder (PTSD), traumatic brain injury (TBI), cognitive issues and memory problems from wounds caused by the blasts from improvised explosive devices or other weapons. A New York Times report calls these types of traumatic brain injuries "the signature wound of the Iraq war."¹ Veterans' family members often say that they don't know the person who came home from the war. As one Iraq war veteran commented, "I don't know who I am anymore."

¹Eckholm, Erik. "Veterans Benefits System Needs Overhaul, Panel Says." *New York Times*: June 8, 2007.

Suicide Epidemic Among Veterans

A CBS News Investigation Uncovers A Suicide Rate Twice That Of Other Americans

Comments 293

NEW YORK, Nov. 13, 2007



Crisis”
States

to

NCW has launched its own pilot study, offering treatment to service members free of charge in exchange for their participation in collecting research data.

The initial results of the study are more positive than expected. The data show significant, lasting symptom reduction and improved functioning consistent with soldiers’ self-reports.

What is needed now is seed funding to extensively document the potential of this therapy at a level that is unassailable by even the most skeptical of detractors.

Iraq War Veteran, 42

TBI and PTSD

This soldier said about his EEG-ST treatment for PTSD and TBI after 18 treatment sessions: “Now I can accept things that cannot be changed, and feel good about myself and be a part of society. If I hadn’t gotten treatment I’d be on the verge of divorce, kids hating me, and I not caring. Now I can be a dad. You’ve given me half my life back. I would have self-destructed.”

e For Vet

Soldier back from Iraq, 39

PTSD

After 11 treatments this medic wrote: “It’s my opinion that this treatment be integrated to every patient from the war in Iraq or Afghanistan and recommended for all PTSD and TBI sufferers.”
...SGT, USA



OUR MISSION: PIONEERING NEW FRONTIERS

THE WAY WE SEE IT, THE STUDY shows EEG-ST has reached a crossroads. We are faced with two choices: resting on our past accomplishments and simply continuing to provide treatment to the best of our ability to the few who can afford it; or moving the field forward by expanding our research efforts, with the ultimate goal of full FDA approval.

Our dedicated staff has chosen the latter path.

In order to expand our activities, we have founded The Neurotherapy Research and Development Association, Inc. (NRDA), a 501(c)(3) not-for-profit organization dedicated to the development and advancement of scientific understanding of this therapy. NRDA has defined three specific goals within its broader mission:

1. To build a body of EEG-ST clinical research data from treating TBI, PTSD and other conditions.
2. To demonstrate through research the efficacy of improved equipment to deliver a therapy that can be used in many health care settings with minimal training and cost.
3. To document therapeutic mechanism of action, information necessary to establish acceptance of this therapy.

Because of these results the Vietnam Veterans of America is supporting further study by facilitating NCW collaboration with Veterans Centers. In addition, a Johns Hopkins psychiatrist is preparing for a study with NCW at the hospital. This study could include brain imaging that will bring the best medicine has to offer in documenting changes in the brain via our therapy.

NCW is dedicating its own limited resources to supporting two pilot studies. The first is the ongoing Iraq War veteran pilot study that led to the presentation of study data to professionals at Walter Reed Army Hospital in February, 2008. A second pilot study of EEG-ST treatment for Fibromyalgia is underway in preparation for application for outside institutional funding.

The cost to NCW for research participation for just one veteran is over \$6,000. With additional resources from NRDA, NCW will conduct a longer study to illustrate the range and scope of this therapy. Simply put, the more people we treat, the stronger our case.

NRDA is firmly committed to this path of research and advocacy to develop a strong case for acceptance within the health care industry, and illustrate that EEG-ST is a safe and effective treatment for a variety of emotional and neurological disorders.

NRDA BOARD MEMBERS

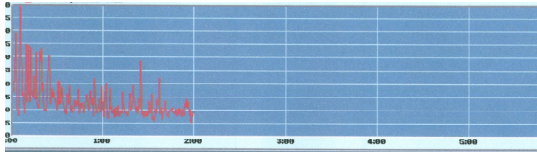
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PRELIMINARY STUDY RESULTS ARE IN

BRAIN RESPONSE TO THE FIRST EEG-ST TREATMENT



The red tracing shows the initial brain activity. It is quite excessive starting at the left but quickly lowers to a level associated with a more normal level of functioning. Such response is frequently seen in persons with post-concussion syndrome.

Pre-Treatment Map

The tall bars on the right show excessive activity often seen in people with TBI.

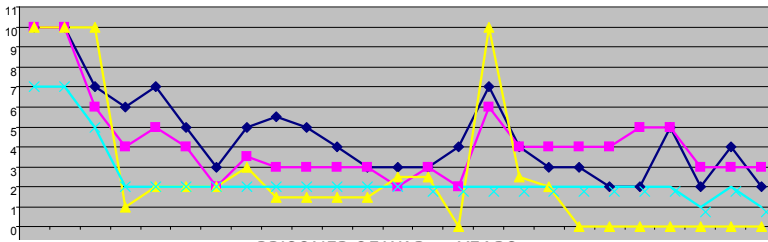


Post-Treatment Map

Note the evenness of the bars associated with significant symptom reduction in this soldier.



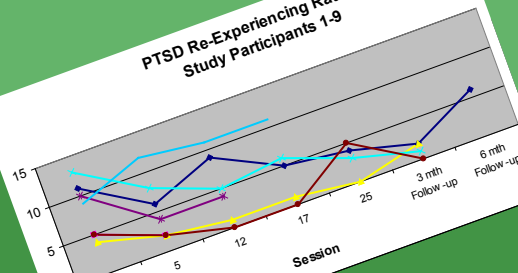
Symptom Ratings: Sleep & Pain, Energy, Flashbacks, Irritability



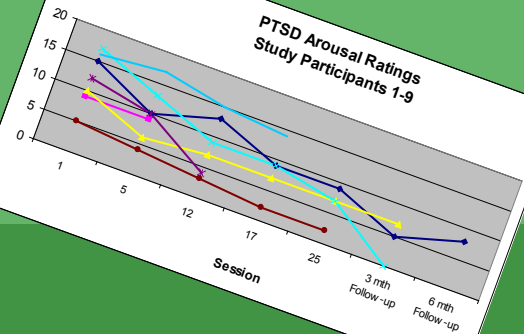
PRISONER OF WAR 5+ YEARS

Aircraft ejection, tree landing, falling 150 feet to ground - many broken bones
 Taken prisoner 1968 - 69; many beatings; Beriberi
 Starting Medications (2-5-08) Current Medication (4-2-08)
 Cardiac Cardiac
 Naprosyn 1,000 mg/day Tylenol 1-2 times/week
 Tylenol daily

PTSD Re-Experiencing Ratings Study Participants 1-9



PTSD Arousal Ratings Study Participants 1-9





SIGNIFICANT CHALLENGES

SUBSTANTIAL OPPORTUNITIES

NRDA is seeking visionary funding partners to support this research in order to offer a brighter future for these veterans, as well as for civilians struggling with symptoms that may be effectively treated with EEG-ST.

NRDA has made early headway in a number of priorities, including the launch of the veteran pilot study and hardware development. We are on the verge of testing vastly improved neurofeedback equipment. Your investment in our work now will feed this forward momentum and help us provide a new dimension in health care.

CHANGE IS ALWAYS POSSIBLE...

“After years of various institutions and therapies, we feel so grateful that our son Bill found a treatment that actually helped him. Previously, Bill had been diagnosed with just about everything found in the books. Drugs were either not effective, or had terrible side effects that made him more angry and irrational than ever. How sad that we did not find you sooner, or that so many people who could benefit, have not found you at all. The miserable years of mental anguish suffered by Bill and his family, actually seem to be fading away... In short, you in particular, and your associates, have been nothing short of miraculous in the life improvement category.” - signed, T and D (the parents of Bill)

