

Criteria for Selection of 10 Brain Injured War Veterans for NBIRR-01 Study

Mild-Moderate TBI or PTSD, 18-65

Clinical Neurology Specialists

Centennial Medical Imaging

1. As the title of the NBIRR-01 study suggests, this is for those suffering from mild-moderate traumatic brain injury or post-traumatic stress disorder. Mild-Moderate TBI or PTSD can lead to total disability, inability work, etc. To many these former service members appear to be uninjured.
 - a. It is not a study designed for those who are not conscious or who have significant other disabilities that make it difficult to follow instructions or fulfill the questionnaires and diagnostics in the study design. That is the Severe TBI study and requires an extensive neurological and neuropsychological battery designed for those suffering from significant disability.
 - b. All must be able to use a computer as there are two neuropsychological test batteries. Those two batteries are the Automaticity Neuropsychological Assessment Metric (ANAM), DoD's official test, and the CNS Vital Signs battery. For those who served in the 101st Airborne, or those who deployed after March, 2008, there should be a baseline (pre-deployment) ANAM test (mandated by the U.S. Congress).
 - c. It is possible to get the pre-deployment ANAM and we would like to have at least 4 persons who have pre-deployment ANAM tests as part of the study. Having results from the base-line test will help everyone see how these former service members are doing, relative to their pre-injury state.
2. It is possible to have a moderate TBI and have a penetrating head wound or had neurosurgery. We have one SPECT image of a suicide attempt and saw extensive repair to the brain tissue that was not removed by the path of the projectile. These individuals can be expected to show significant clinical improvement and have a much improved level of disability. We would like no more than two of the 10 in this category. They must be able to complete all entry level diagnostics.
3. The other 8 subjects selected should be:
 - a. Enrolled in Remedial Education in College:
 - i. Many injured veterans are taking advantage of their GI bill. Unfortunately, since the LSU pilot data demonstrated a 15 point IQ increase from pre-treatment to post-40 treatments, many veterans are functioning below their pre-injury IQ. Many struggle with subjects when they previously demonstrated proficiency. The most expensive program in the nation's colleges and universities today is remedial education. It is anticipated, based upon current and prior results, these individuals will be

able to perform better in academic situations, as well as have improved executive function.

- ii. Unemployable or Unable to work or Difficulty Remaining Employed
 1. Executive Function disorders, headaches, PTSD, and sleep disorders all help prevent veterans from pursuing gainful employment.
 2. To date 80% of those in the pilot study who fit this category (which was virtually all of the 30 personnel sent to LSU), were able to return to active military duty, work, or go on to functional higher education.
 3. Results are tracked in the study to follow future employment

Preference for National Guard:

There should be a preference for National Guard members, who often have received the least services and least screening.

We look forward to being able to help Nevada's War veterans. In our experience, the treatment also works for personnel from previous wars. For those who wish to have treatment from previous wars, they fit the study criteria as long as they are under 66. The focus of this 10 patient pilot is on veterans from the current wars on terror.

Because Dr. Germin is not a primary care physician, all of these study subjects should have primary care physicians who can assist with other medical conditions and issues as needed.

All 10 study subjects will receive pre-post imaging in addition to the neuropsych test batteries and health questionnaires so that physiological changes in the brain, as well as the behavior changes they experience, can be cross correlated and published.