



TBI Updates

UNIVERSITY OF WASHINGTON
TRAUMATIC BRAIN INJURY
MODEL SYSTEM



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THE APP STUDY

Amitriptyline to Prevent Post-traumatic headache

- **Think with a headache?**
- **Talk with a headache?**
- **Have you tried to work with a headache?**



Any activity is difficult when you have a headache. Now imagine having one every day, in other words, having a ‘*chronic*’ headache. Headaches are one of the most common complaints after Traumatic Brain Injury in civilians and in the military. We hear this complaint from our patients all the time, and once headaches become ‘*chronic*’, they are not always easy to treat. Many people report the onset of new headaches after TBI, and almost half of these have frequent headaches.

Because this problem is so prevalent, the University of Washington’s TBI Model System became interested in developing treatments which could prevent headache from developing into *chronic* headache.

We have just received funding for a new study looking at whether early treatment with **amitriptyline**, a commonly prescribed medication, can help prevent the development of chronic headache after a mild traumatic brain injury (MTBI).

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We will be recruiting potential participants from Harborview Medical Center who have a diagnosis of mild TBI and who are having headaches. There will be two groups for this study; both groups will be given the study drug amitriptyline. The *first group* will begin the study medication right away and *the second group* will start 30 days after they begin the study. There will be about 36 people in each group.



Group 1

**Takes
Amitriptyline
immediately**

Group 2

**Takes
Amitriptyline
after 30 days**

By having the two groups begin at different times, we can see if this makes a difference in the medicine's ability to prevent headaches.

This study is also going to be useful in looking at the different ways of keeping a headache diary (for the mild TBI patient population). Headache diaries help to keep track of how often and how severe headaches are. We will ask the patient to fill out their diary each day during the study to rate the frequency and level of their headache. This diary will be available on a smart phone application, on a secure internet survey, or on paper, depending on what the patient chooses.

This study provides a unique opportunity to lessen the impact of headache; which often affects being able to think and function well after TBI. Early prevention holds the promise of relieving pain, improving function and the quality of life for persons with TBI.

For more about headaches after TBI, please check out our educational brochure about headache, or our published papers: www.tbi.washington.edu

The TBI Model System welcomes you to join us for the next forum on Love and Relationships after TBI

“For Better or Worse”: Love and Relationships after TBI

Wednesday, February 13th

7:00 - 8:30 pm

University of Washington

South Campus Center

[\(Located directly behind main hospital\)](#)

Room SCC 316



Relationships can be unique, complex, rewarding...the list goes on. Now add a TBI to that!

Join us as we welcome three couples to discuss their different experiences with TBI and their relationships for our special *Valentine's Day* themed forum.

Questions? Email: uwtbi@uw.edu

March is Brain Injury Awareness Month

A brain injury can happen anytime, anywhere to anyone – brain injuries do not discriminate. Did you know that 1.7 million people will sustain a brain injury each year? An injury that happens in an instant can bring a lifetime of physical, cognitive and behavior challenges and early, equal and adequate access to care will greatly increase overall quality of life. We encourage all of our readers to take action and spread the word about brain injury.

Help educate yourself and others by visiting our website:

www.tbi.washington.edu

Learn about ways to volunteer and donate by visiting the [Brain Injury Association of Washington's Website](#)

Recommended Reading: Research Highlights from the TBI Model System

Amantadine and Traumatic Brain Injury

The research team, led by Joseph T. Giacino of the [J. F. K. Johnson Rehabilitation Institute](#) and Dr. John Whyte of the [Moss Rehabilitation Research Institute](#), divided patients into two groups, carefully matched for the severity of their injuries. Members of one group got two doses of amantadine a day, given through their feeding tubes. Members of the other group received placebo pills

After four weeks, the researchers analyzed the patients' progress, using a standard rating scale that scores areas of coordination and communication. The scale ranges from zero, for no disability, to 29, for a state of total unresponsiveness, and is scored regularly at bedside. Since this was a blinded study, the person who was scoring the patient did not know whether they were receiving Amantadine or the placebo.

Since all patients injuries were recent, it was expected that almost all of the patients improved somewhat during the four weeks. This indeed occurred. However, the group receiving amantadine showed more improvement. As stated in the results section of this paper, "During the 4-week treatment period, recovery was significantly faster in the amantadine group than in the placebo group".

Original Amantadine Publication:

Placebo-Controlled Trial of Amantadine for Severe Traumatic Brain Injury

Joseph T. Giacino, Ph.D., John Whyte, M.D., Ph.D., Emilia Bagiella, Ph.D., Kathleen Kalmar, Ph.D., Nancy Childs, M.D., Allen Khademi, M.D., Bernd Eifert, M.D., David Long, M.D., Douglas I. Katz, M.D., Sooja Cho, M.D., Stuart A. Yablon, M.D., Marianne Luther, M.D., Flora M. Hammond, M.D., Annette Nordenbo, M.D., Paul Novak, O.T.R., Walt Mercer, Ph.D., Petra Maurer-Karattup, Dr.Rer.Nat., and Mark Sherer, Ph.D.

New England Journal of Medicine 2012; 366:819-826 [March 1, 2012](#) DOI: 10.1056/NEJMoa1102609



What is Amantadine...Have I heard that before?

Amantadine was first approved by the U.S. Food and Drug Administration for treatment of influenza in 1966. Three years later in 1969, it was discovered by accident that it was beneficial in treating symptoms of Parkinson's Disease.

So, it is categorized as an antiviral medicine and an antidyskinetic medicine. A quick Google search of Amantadine could lead to confusion. Amantadine was one of the first drugs that was effective in treating influenza, and as a result there has been improper use of this human antiviral in animals. In some reports, it is incorrectly described as an antibiotic. Amantadine is not an antibiotic, and will not prevent bacterial infections. As of 2009, the U.S. Food and Drug Administration is no longer recommending its use for influenza due to Amantadine resistant strains.



Who's Who?



For those who were able to attend online or in person for our **October 2012 Community Forum on Sleep after TBI**, then you might recognize the newest addition to the TBI Model System at University of Washington...

Craig DiTommaso, MD is completing his Fellowship in Brain Injury Medicine and is an Acting Instructor within the Department Rehabilitation Medicine. Dr. DiTommaso attended medical school at Tulane University in New Orleans and completed his residency through Baylor College of Medicine in Houston. While in Houston, he was one of the



co-founders of an organization that provided medical equipment to low income individuals with disabilities. Dr. DiTommaso has published on traumatic brain injury, stroke, and spasticity management. Currently he is working on smart phone applications for headache management and the use of light therapy to treat insomnia after TBI.

Anger Self Management Training (ASMT)

The purpose of this study is to explore two different treatment methods both of which involve working one-on-one with a therapist to learn if these methods might help people with traumatic brain injury who have problematic anger or irritability. Volunteers will receive therapy for 8 weeks and will have their anger or irritability evaluated before, during, and after treatment.

You may qualify for this study if you:

- **Were 16 or older when you sustained your traumatic brain injury,**
- **Are currently less than 65 years old,**
- **Have anger/irritability that is new since your traumatic brain injury, or worse than before your traumatic brain injury**

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[Note that we cannot ensure confidentiality via email]



Social Skills after TBI

Treatment for Social Competence in Persons with Traumatic Brain Injury (TBI)

New Group Starting in March 2013!

The University of Washington is taking part in a research study that is investigating the effectiveness of a treatment program for Social Competency for people who have sustained a TBI. The purpose of this study is to find out if improving social competence skills (getting along with and being comfortable talking with other people) in a special group program (called the Group Interactive Structured Treatment, or 'GIST') helps people with a TBI interact better with others than learning those same skills in a classroom setting.

If eligible, the treatment program is 13 weeks, and would require the ability to attend group sessions at the University of Washington or Harborview Medical Center in Seattle, WA. **Our next group will begin in March, 2013.**

To find out if you're eligible, please contact:

Leslie Kempthorne

ette@uw.edu or 206-543-0219



The following study seeking volunteers for TBI participants. This research is conducted through Pacific University and has been approved by their institutional review board (IRB).

Seeking Volunteers for TBI Participants

Ethnicity and Community Involvement

We are seeking individuals' participation in a research study investigating the relationship between ethnic identity and how someone reintegrates into his or her community after traumatic brain injury (TBI), including such daily life activities as home and family activities, social activities, employment, school, and volunteerism. The results of this study may be used to offer more tailored individual treatments to those who have sustained TBI.

Eligibility to Participate

- At least 18 years old
- Have experienced a traumatic brain injury (such as from a fall or auto collision)
- At least one year past time of injury
- No other neurological disorder such as seizure disorder or dementia *before* the head injury. However, if you have neurological conditions *after* the head injury, you are still invited to participate.

To participate

If you are interested in participating in this anonymous survey on SurveyMonkey, click on the following link or copy and paste it into your web browser: www.surveymonkey.com/s/TBIResearch

For more information

This project is being conducted by Jennifer Peraza (Student Principal Investigator) and Dr. BJ Scott (Faculty Advisor) at Pacific University and has been approved by the Pacific University Institutional review Board (IRB).

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BJ Scott, Psy.D.	Faculty Advisor	bjscott@pacificu.edu	503-352-2409



Save the Date

October 19, 2013

The 7th Annual Gala, Dinner, and Auction

[Click here for Event Details](#)

**Interested in hearing the latest news from the
University of Washington's TBI Model System?**

*Subscribe to our Newsletter by emailing uwtbi@uw.edu,
and indicate "Newsletter Subscribe" in subject line.*

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