

# TBI Therapy

## Regenerative Therapy for Brain Injury

TBI Therapy's procedures and protocols are patent pending, uniquely sophisticated, presently scarce, and at the forefront of neuro-regenerative medicine. TBI Therapy treats traumatic brain injury patients by synergistically combining the following regenerative therapies:

Adult Stem Cells

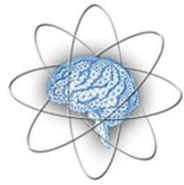
Platelet Rich Plasma

Hyperbaric Oxygen Therapy

Intravenous Nutrition

Cranial Osteopathy

Ketogenic Diet



## TBI Therapy

Regenerative Therapy for Brain Injury

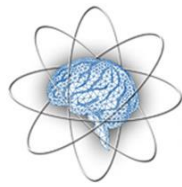


“Chaz was in a coma for 64 days and suffered multiple compound fractures of his left arm and leg as well as multiple dislocations and fractures to his right hand. Chaz had to relearn how to walk, talk, eat, speak, and care for himself. Chaz suffered from memory issues and balance issues. The emotional control issues were very hard.

Chaz went to TBI Therapy for a 10-day treatment. After Chaz's first treatment at TBI Therapy and 3 hyperbaric chamber treatments I noticed a change in my son. Chaz had that light in his eyes again. His balance improved - I videotaped him walking up the stairs without holding on to the rail. Chaz even had immediate improvement of his short-term memory.

Since returning to California, Chaz has shown remarkable progress. We have continued his hyperbaric treatments and followed all of the post treatment procedures laid out by TBI Therapy. Chaz continues to improve. I believe with all my heart that the treatment from TBI Therapy has changed my son's life, to allow him to be the best Chaz he can be. I believe Chaz will continue to improve following the protocols set forth by TBI Therapy.”





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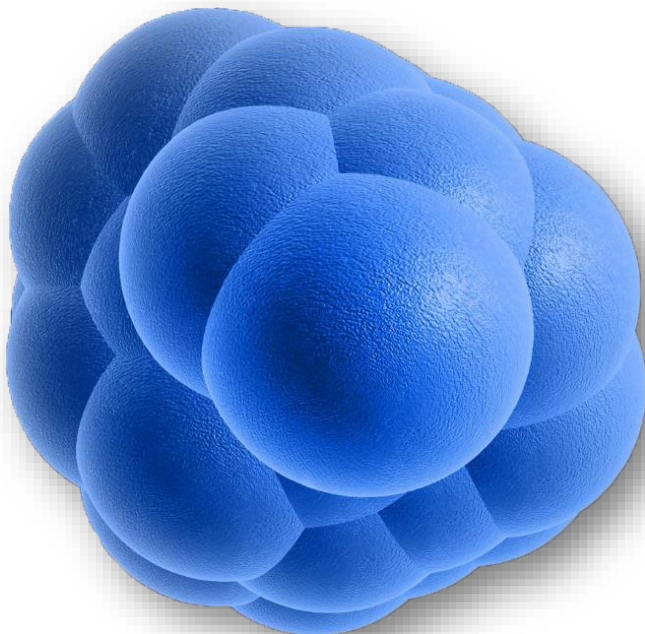
## Intranasal Adult Stem Cells

### Benefits

- Increases neuroplasticity
- Stimulates tissue regrowth
- Promotes formation of new blood vessels
- Down regulates neuroinflammatory cytokines

### Procedure

Stem cells are harvested from the patient's blood by a simple blood draw typically 6-12 hours before they are infused. During infusion, the patient will lay back on the exam table with their head tilted perpendicular to the ground. After local anesthetic is sprayed into the nose, the cells are dripped up the nose with a special device. The patient will lie there for another 15 minutes while the cells infuse into the brain. After this intranasal infusion along with intravenous infusion of stem cells are performed, the patient is free to get up and continue their daily activities.

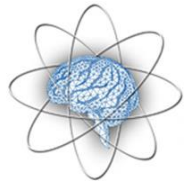


To promote optimal regeneration, stem cell infusions are usually paired with several hyperbaric oxygen therapy (HBOT) sessions before and after.

### Research

Known as pluripotent adult stem cells, these cells have a unique technology behind their harvesting only available at a few select clinics in America. Pluripotent stem cells work like epiblast cells, meaning they can turn into any cell of the germ layer. Studies show these types of cells can pass through the nose and the blood brain barrier and flow right into the cerebral spinal fluid to nourish the brain tissue.





# TBI Therapy

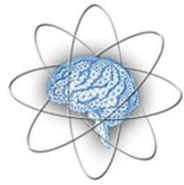
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"In July 2015, I fell two feet while hiking at Red Rocks and hit my head. In December 2016, I hit my head again in the same place. I was mostly homebound and unable to work for 4 more months. My short-term memory was quite challenged, I struggled to sleep deeply and never woke up feeling rested. I experienced mood swings, depression, constant head pressure and light/sound sensitivity.

Three months after my first stem cell procedure at TBI Therapy, I felt well enough to travel for the first time since going down with my symptoms. My light and sound sensitivity had reduced, and my mood was improving.

In June 2017, I went in for my second intranasal stem cell procedure and by August I felt well enough that I started saying yes again to facilitating events and speaking gigs. I also experienced relief from anxiety. With the stem cell procedures, the results were never immediate but 8-12 weeks post procedure I experienced a noticeable jump in my healing. Even though, I'm still not 100% back to what I was, TBI Therapy has turned me into a TBI THRIVER, not just a survivor. I'm happy. I enjoy life again, can travel and am doing work in the world that's more aligned with myself than ever."





## Intranasal Platelet Rich Plasma (PRP) and Insulin

### Benefits

- Improves brain energy production
- Decreases brain cortisol
- Improves memory
- Increases the expression of anti-inflammatory microglia

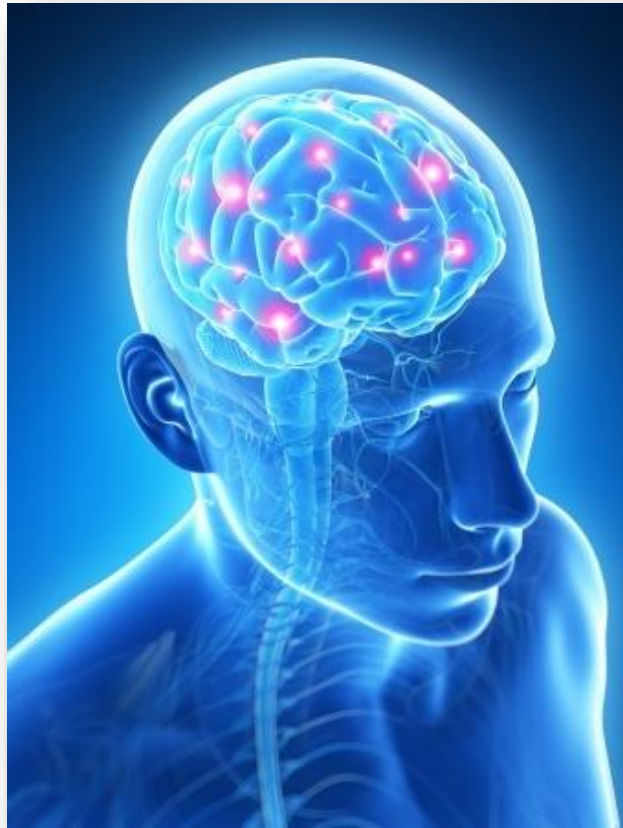
### Procedure

PRP is harvested from the patient's blood by a simple blood draw. During infusion, the patient will lay back on the exam table with their head tilted perpendicular to the ground. After local anesthetic is sprayed into the nose, a PRP cocktail composed of the patient's plasma, insulin, B12, and glutathione is dripped up the nose with a special device. The patient will lie there for another 15 minutes while the PRP infuses into the brain. After this intranasal and intravenous infusion of the PRP cocktail, the patient is free to get up and continue their daily activities.

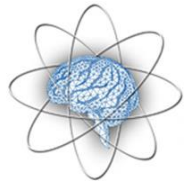
To promote optimal regeneration, PRP is usually paired with several hyperbaric oxygen therapy (HBOT) sessions before and after. The PRP is infused the day before the intranasal stem cell procedure.

### Research

PRP has been used for years in the treatment of musculoskeletal injuries due to its anti-inflammatory properties and growth promoting effects on injured tissue. Studies have tested intranasal insulin for the treatment of Alzheimer's Disease and epilepsy resulting with the reversal of neurodegeneration, stimulation of neurogenesis, and the restoration of memory.







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"I am \*super happy\* to report that three and a half months after visiting TBI Therapy for treatment, my life has radically changed. It really proved to be everything I'd hoped it would be."

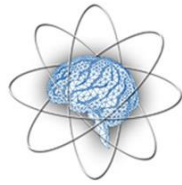
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"TBI Therapy and the staff at TBI Therapy are the best. We were able to coordinate over the phone our son's treatment plan. Our son had the PRP procedure as well as the stem cell procedure. He had a week of HBOT and several cranial osteopathy sessions. We have noticed our son's speech is clearer and he is relaxed more than usual. Cutting edge technology and treatment. Kudos to these doctors who believe medicine is not always the answer. Thank you so much for your help and understanding. We seem to have to seek out treatments ourselves and I am very glad God led us to TBI Therapy."

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## Hyperbaric Oxygen Therapy

### Benefits

- Induces neuroplasticity
- Increases tissue oxygenation
- Generates new capillary networks and restores blood supply
- Increases stem cells in the blood (2-3 fold after one treatment)

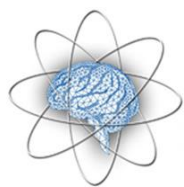
### Procedure

The patient lies down in a chamber that can be hard sided (as shown in the image) or soft sided (most commonly home chambers). The chamber then fills with pressure while the patient breathes 100% oxygen. Typically, after 75 minutes in the chamber, the pressure will be lowered and then the patient will exit. In total, the procedure is 90 minutes long.



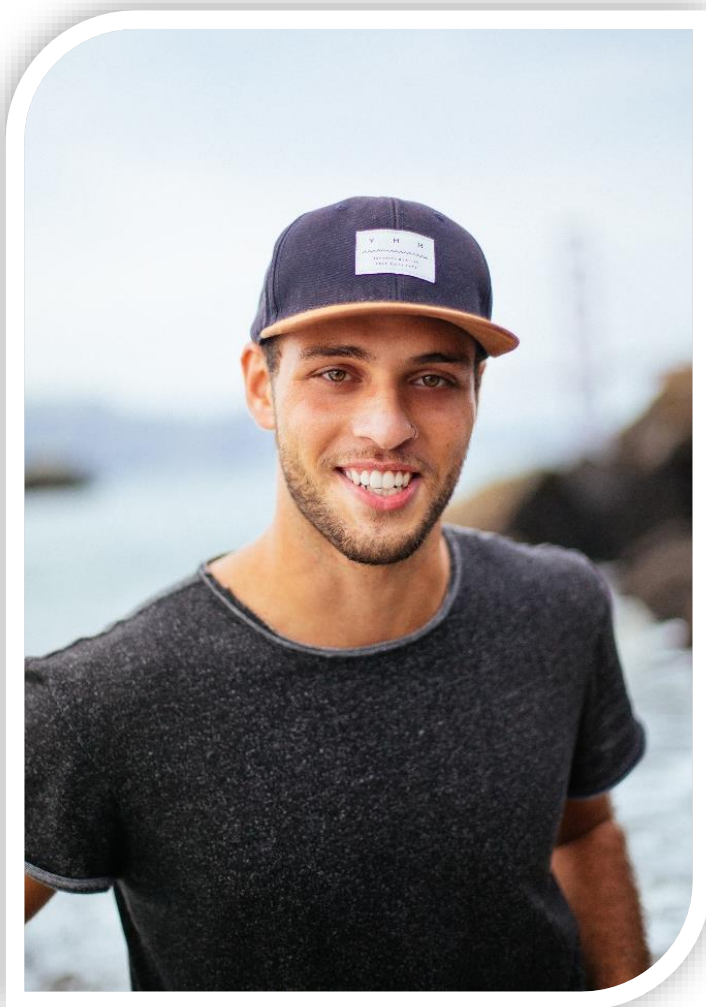
### Research

Traditionally, HBOT has been used to treat carbon monoxide poisoning, crush injuries, necrosis of soft tissues, radiation injuries, skin grafts and more. Within the last decade, HBOT has been increasingly used for brain injuries and have shown to induce neuroplasticity leading to the repair of brain function and improved quality of life.



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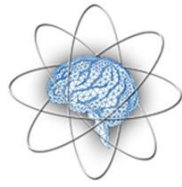
"I was so hypersensitive to light and sound that I had to wear ear plugs, headphones, sunglasses, a giant sun hat, and a scarf just to attend the appointment. For a year after the accident I could not drive, I lived in darkness at home, and struggled emotionally. My sensitivity to light and sound would elicit unreasonable emotional responses of fear.

During the intranasal treatments it was like a stream of information had been let loose - like a dam that had busted. I saw clips of memories such as faces, numbers, and letters. After 5 minutes the stream of thoughts slowed down. Upon completing the second treatment for the day, I had the same reaction and results except the stream of information slowed down and I could recognize images and conversations I had with people. I started having expanded

thought. I felt for the first time in a year that I had some clarity. The initial feeling of bubbly effervescent seemed to give me life. The light was on in the back of a dark warehouse. I was excited I was able to read more than 2-3 sentences without triggering a migraine.

Within the following days it was like an awakening. I could turn on lights for a few minutes and keep the TV on. It seemed like a light switch was turned back on inside my head even though it was dim. There was new activity occurring. I experienced music playing in my head. The ability to think and plan returned... now with a renewed sense of purpose."





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## IV Nutrition

### Benefits



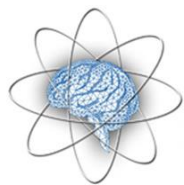
- Improves metabolic activity and energy levels
- Improves detoxification and replenishes vitamins
- Reduces systemic pain and inflammation with fast onset

### Procedure

Intravenous nutrition (IVs) is administered before and after stem cell, PRP, and hyperbaric oxygen treatments. TBI Therapy's nutrient cocktail includes the Myer's cocktail with potassium, magnesium, calcium, B-complex, B5, B6, and B12, and ascorbate followed by IV PRP and glutathione. The following day, the patient receives IV NAD+ followed by IV stem cells.

### Research

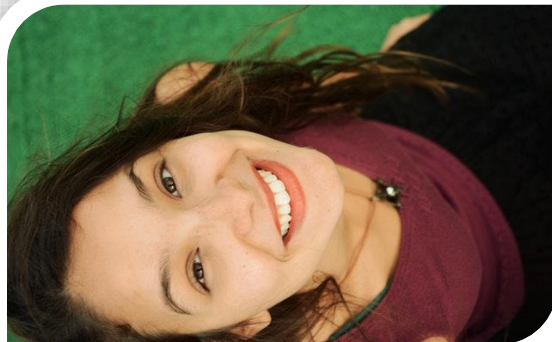
The benefits of IV supplementation allow TBI patients to re-establish vitamin levels quickly and efficiently. B vitamins lower homocysteine levels in the blood and have shown to slow brain shrinkage, therefore improving memory, mood, and energy levels.



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"My mind is clearer than it has been in years. I am much closer to the vitality and clarity that I used to feel in my mind every day before my head injury."

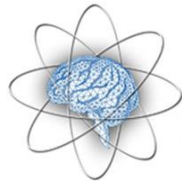


"I have managed two weeks in a row of four work days (major accomplishment), so it looks like the energy thing is kicking in. VERY happy. The increased energy seems to be permanent."



"Corey is doing good. He is still going to the gym three days a week to work out. He is also doing physical therapy and horse therapy three times a week working to strengthen his core. His spasticity seems to be improving and is more noticeable when he gets frustrated. He has not had any major attitude outburst and is starting the new year with a positive attitude determined to keep working hard and stay focused on improving."





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## Cranial Osteopathy

### Benefits

- Improved cerebral spinal fluid (CSF) flow
- Reduces headache pain
- Increases nourishment of brain tissue

### Procedure

With cranial osteopathy, a craniosacral practitioner uses gentle hands to knead the 22 cranial bones, membranes, and CSF. This cranial manipulation addresses areas of restricted movement that compromise function to re-establish normal movement, subsequently reducing pain and improving daily functioning.

### Research

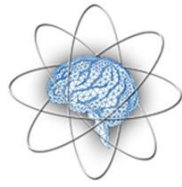
Because the craniosacral system encompasses the brain and spinal cord, it influences the entire nervous system, affecting many body functions. Patients often report a sense of deep relaxation during and after the cranial treatment session and may feel light-headed. These effects are popularly associated with increases in endorphins, but research shows they may be brought about by the endocannabinoid system.



Many studies have shown that the manipulation from cranial osteopathy reduces pain, sleep disturbance, anxiety, and all around improved quality of life. After just two weeks of cranial osteopathy, TBI survivors found a decrease in headaches, vertigo, muscle tension, and an improvement in their general well-being.

TREATMENT





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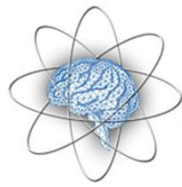


"We are a medical family from California and only wanted to find the best treatment for our son after suffering a severe brain injury in a motor vehicle accident. The staff is so helpful from arranging the first phone consult to helping us coordinate our stay. We feel so blessed to have found this beautiful healing clinic in Colorado. Would highly recommend anybody that has a loved one suffering and wants to seek treatment to put their faith in TBI Therapy. I'm so glad we did."

"After doing the TBI Therapy protocol, I now have the following improvements:

- Better ability to focus
- Improved eyesight
- More mental stamina
- Better mental clarity
- Less emotional stress
- Increased ability to prioritize"





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## Ketogenic Diet

### Benefits

- Improved protection from oxidative stress
- Increased synthesis of calming neurotransmitters (including GABA)
- Produce cortical sparing and less apoptotic neuro-degeneration

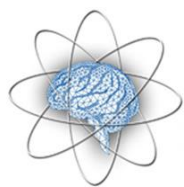
### Procedure

Associated with improved brain function, a ketogenic diet is a high-fat, adequate-protein, low-carbohydrate diet. TBI Therapy's recommended ketogenic diet includes Bulletproof®'s Brain Octane Oil because it contains 16x more ketones than found in traditional coconut oil. It is recommended the patient begins this treatment at the start of their treatments with TBI Therapy. Intermittent fasting may also be recommended.

### Research

The ketogenic diet has long been used as a treatment for epilepsy since the 1920's. Ketones, the result of breaking down fat, have shown to decrease oxidative stress, increase antioxidants, and scavenge free radicals that flood the brain after a TBI. Ketones, from a high fat diet, increase the production of the neurotransmitter GABA and downregulate the neurotransmitter glutamate-producing a calming mental state and improving mitochondrial biogenesis.



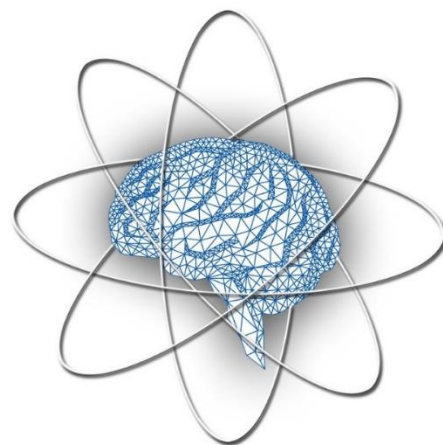


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## TBI Therapy Protocols

### Each Protocol Includes:

- 60 Minute Physician Consultation
- Cranial Osteopathy
- Ketogenic Diet
- Hyperbaric Oxygen Therapy (2 sessions)
- Intranasal PRP (Platelet Rich Plasma)
- Intravenous PRP (Platelet Rich Plasma) plus Nutrition
- Intranasal PRP-PDSC (Peripheral Derived Stem Cells)
- Intravenous PRP-PDSC (Peripheral Derived Stem Cells) plus NAD+
- Take-home supplements: Brain Octane Oil by Bulletproof®, Elk Antler by High Wire Ranch, BrainOn by E3Live®, Stem Xcell™ by Enzymedica®, and *Fat for Fuel* by Dr. Joseph Mercola®
- Take-home drugs and devices: Insulin for personal administration and brainwave training player designed by Dr. Jeffrey Thompson



### Protocols Are Offered as a 2, 3, 10 or 40-day Package (dependent on severity)

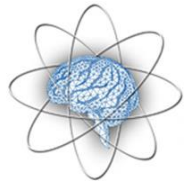
2-Day: Includes all the above.

3-Day: Includes one additional hyperbaric oxygen treatment and one additional intranasal and IV stem cell treatment.

10-Day: Includes a total of 10 hyperbaric oxygen treatments, plus one additional cranial osteopathy session, one additional intranasal PRP and IV session, and one additional intranasal stem cells and IV treatment.

40-day packages or more are determined upon consultation.





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## Pre-Treatment and Post-Treatment Protocols

### Pre-Treatment (to begin 3 weeks prior to treatment)

Hyperbaric Oxygen Therapy: 10-20 sessions

Cranial Osteopathy: 1 session per week

EEG Biofeedback / Neurofeedback: 1 session per week

Brainwave Training Player: 30 minutes a day

Supplements: Begin 15 days before PRP or stem cell treatment

### Post-Treatment

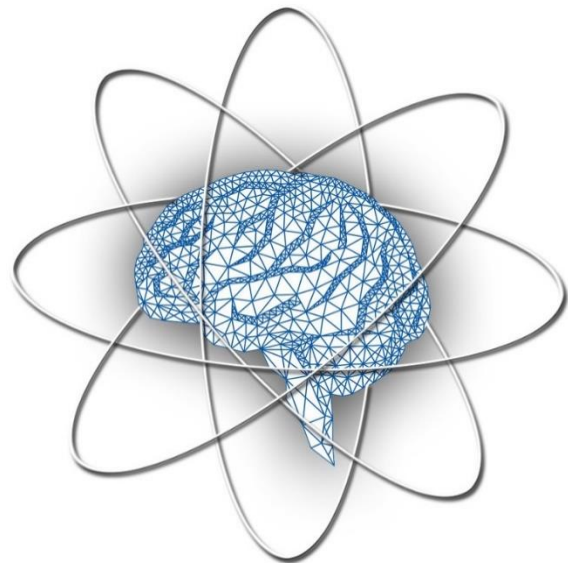
Hyperbaric Oxygen Therapy: 20-25 more sessions or home chamber x 3 months

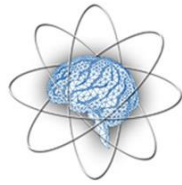
Cranial Osteopathy: 1 session per week for 12 weeks total

Intranasal Insulin: 10-21 days

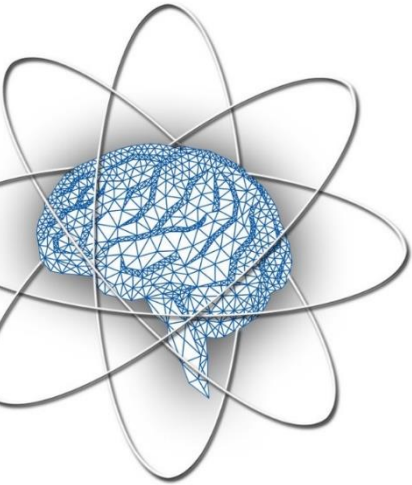
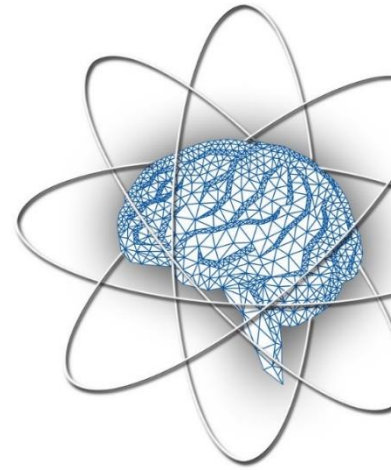
Brainwave Training Player: 12 weeks

Nutrition / Supplements: 8-12 weeks





**TBI Therapy**  
Regenerative Therapy for Brain Injury



## Contact Information

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Please find more references at [tbitherapy.com/tbi-protocol-references/](http://tbitherapy.com/tbi-protocol-references/)