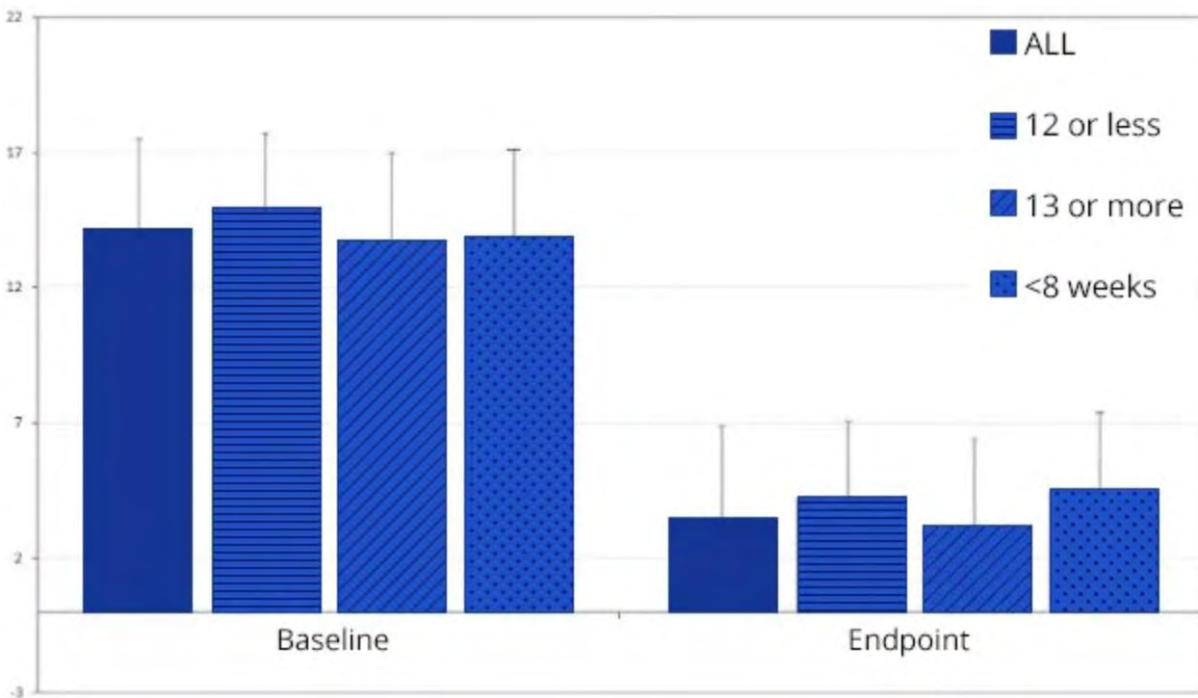


Published Peer-Reviewed Research

In an open-label clinical series of 39 sequential patients treated for TBI between March 2013 and May 2017, the response of depression symptoms was also assessed.

Our clinical data has shown that patients see resolution of their depression symptoms, often in as little as eight weeks. Patients have remained depression-free for years after one course of treatment. The chart below shows how patients' scores on depression scales dropped dramatically after receiving multi-Watt NILT. Notable is both the magnitude and the rapidity of the response.



**Patient 201:**

66 yo female with history of long-standing depression. Although she took antidepressants, she still felt quite depressed.

<i>Before Treatment</i>		Depression Measures
Headache		Zung Depression Scale = 42/80 (Moderate)
Hyperarousal		
Sleep disturbance	✓	
Memory Problems		Quick Inventory of Depression Symptoms = 16/27 (Moderate)
Cognitive Problems		
Balance Problems		
Depression	✓	Beck Depression Scale = 20/60 (Moderate)
Anxiety	✓	
Suicidal Ideation	✓	
Irritability		

**Patient received 16 treatments with Multi-Watt Infrared Laser over approximately 16 weeks.**

After treatment, the patient reported her depression was gone. “This was truly remarkable!”

<i>After Treatment</i>		Depression Measures
Headache		Zung Depression Scale = 25/80 (Mild)
Hyperarousal		
Sleep disturbance		
Memory Problems		Quick Inventory of Depression Symptoms = 6/27 (Mild to Non Significant)
Cognitive Problems		
Balance Problems		
Depression		Beck Depression Scale = 7/60 (Non Significant)
Anxiety		
Suicidal Ideation		
Irritability		

**Patient 202:**

28 yo male with history of long-standing depression which had failed to respond to antidepressants, antipsychotics, and lithium. Patient had been depressed for over 11 years and was often suicidal.

<i><b>Before Treatment</b></i>		<b>Depression Measures</b>
Headache		Zung Depression Scale = 56/80 (Severe)
Hyperarousal		
Sleep disturbance	✓	
Memory Problems		Quick Inventory of Depression Symptoms = 14/27 (Moderate)
Cognitive Problems	✓	
Balance Problems		
Depression	✓	Beck Depression Scale = 30/60 (Moderate)
Anxiety	✓	
Suicidal Ideation	✓	
Irritability	✓	

**Patient received 14 treatments with Multi-Watt Infrared Laser over approximately 5 weeks.**

After treatment, the patient reported feeling much better. He still has some social anxiety.

<i><b>After Treatment</b></i>		<b>Depression Measures</b>
Headache		Zung Depression Scale = 42/80 (Moderate)
Hyperarousal		
Sleep disturbance	✓	
Memory Problems		Quick Inventory of Depression Symptoms = 0/27 (Non Significant)
Cognitive Problems		
Balance Problems		
Depression		Beck Depression Scale = 10/60 (Mild to Non Signif.)
Anxiety	✓	
Suicidal Ideation		
Irritability		

**Patient 203:**

43 yo female with history of concussion and subsequent severe crippling depression. “I was curled up on my bed for days on end. I could not take care of my children”.

<i>Before Treatment</i>		Depression Measures
Headache	✓	Zung Depression Scale = 66/80 (Severe)
Hyperarousal		
Sleep disturbance	✓	
Memory Problems	✓	Quick Inventory of Depression Symptoms = 14/27 (Moderate)
Cognitive Problems	✓	
Balance Problems		
Depression	✓	Beck Depression Scale = 49/60 (Severe)
Anxiety	✓	
Suicidal Ideation	✓	
Irritability	✓	

**Patient received 35 treatments with Multi-Watt Infrared Laser over approximately 38 weeks.**

After treatment, the patient reported feeling much better. “I still have struggles, but I’m not holed up in my room for days at a time. I’m taking care of my kids and feel like I am back in life”

<i>After Treatment</i>		Depression Measures
Headache	✓	Zung Depression Scale = 37/80 (Mild)
Hyperarousal		
Sleep disturbance		
Memory Problems		Quick Inventory of Depression Symptoms = 5/27 (Mild to Non Significant)
Cognitive Problems		
Balance Problems		
Depression		Beck Depression Scale = 12/60 (Mild)
Anxiety	✓	
Suicidal Ideation		
Irritability	✓	

**Patient 204:**

56 yo female with history of long-standing depression which had failed to respond to a multitude of medications. Patient had been depressed for over 12 years and was on disability as a result.

<i>Before Treatment</i>		Depression Measures
Headache		Zung Depression Scale = 59/80 (Severe)
Hyperarousal		
Sleep disturbance	✓	
Memory Problems	✓	Quick Inventory of Depression Symptoms = 23/27 (Severe)
Cognitive Problems	✓	
Balance Problems		
Depression	✓	Beck Depression Scale = 54/60 (Severe)
Anxiety	✓	
Suicidal Ideation	✓	
Irritability		

**Patient received 20 treatments with Multi-Watt Infrared Laser, plus 4 infusions of low-dose ketamine, over approximately 9 weeks.**

After treatment, the patient reported marked subjective improvement. “I’m smiling all the time. I feel happy! My psychiatrist was shocked when he saw me after this treatment.”

<i>After Treatment</i>		Depression Measures
Headache		Zung Depression Scale = 39/80 (Mild)
Hyperarousal		
Sleep disturbance		
Memory Problems		Quick Inventory of Depression Symptoms = 8/27 (Mild to Non Significant)
Cognitive Problems		
Balance Problems		
Depression		Beck Depression Scale = 38/60 (Mild)
Anxiety		
Suicidal Ideation		
Irritability		

**Patient 205:**

21 yo female with history of severe depression and anxiety. She had tried many medications without lasting benefit. She always slipped back into severe depression.

<i>Before Treatment</i>		Depression Measures
Headache	✓	Zung Depression Scale = ND
Hyperarousal		
Sleep disturbance	✓	
Memory Problems		Quick Inventory of Depression Symptoms = 13/27 (Moderate)
Cognitive Problems	✓	
Balance Problems		
Depression	✓	Beck Depression Scale = 28/60 (Moderate)
Anxiety	✓	
Suicidal Ideation		
Irritability		

**Patient received 14 treatments with Multi-Watt Infrared Laser over approximately 4 weeks.**

After treatment, the patient reported her depression was strikingly better. She was also more resilient. She noted that when her mother suddenly passed away, she expected herself to sink into a deep depression. But she did not. She was sad, but she was able to keep functioning.”

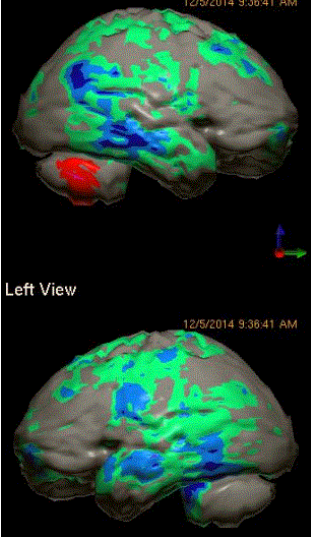
<i>After Treatment</i>		Depression Measures
Headache		Zung Depression Scale = ND
Hyperarousal		
Sleep disturbance		
Memory Problems		Quick Inventory of Depression Symptoms = 0/27 (Non Significant)
Cognitive Problems		
Balance Problems		
Depression		Beck Depression Scale = 4/60 (Non Significant)
Anxiety	✓	
Suicidal Ideation		
Irritability		

Patient 301

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**Patient 301:**

67 yo male with Parkinson's disease with 10 years duration. Patient had retired due to his illness. Patient was currently taking Sinemet at a dose of 25/100 distributed 9 times during the day.

<i>Before Treatment</i>		<b>SPECT Scan</b>	
Headache			
Hyperarousal			
Sleep disturbance	✓		
Memory Problems			
Cognitive Problems	✓		
Balance Problems	✓		
Depression			
Anxiety	✓		
Suicidal Ideation			
Irritability			
Tremor	✓		

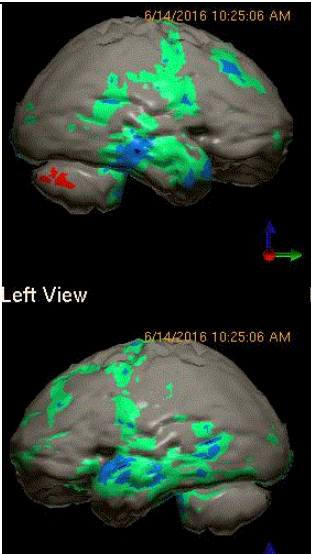
**Gait & Balance:** Patient was unable to walk on a balance beam. Patient could not maintain position on a mini-trampoline when gently pushed. Gait was slow with limited arm movement.

**Tremor:** Tremor was notable with writing and at rest.

**Patient received 20 treatments with Multi-Watt Infrared Laser over approximately 9 weeks. He returned after 6 months to have a second course of 10 treatments.**

# Patient 301

After treatment, the patient reported improved gait and reduced balance issues. He was able to walk on a balance beam to 10 feet. Ability to maintain position on a mini-trampoline was slightly better. Gait was more free with swinging of the arms. Tremor was less pronounced. He noted that his dose of Sinemet has been reduced to 25/100 distributed 4 times during the day. This dose has remained unchanged for over 12 months (unusual).

<i>After Treatment</i>		<b>SPECT Scan</b>	
Headache			
Hyperarousal			
Sleep disturbance	✓		
Memory Problems			
Cognitive Problems	✓		
Balance Problems			
Depression			
Anxiety			
Suicidal Ideation			
Irritability			
Tremor	✓		

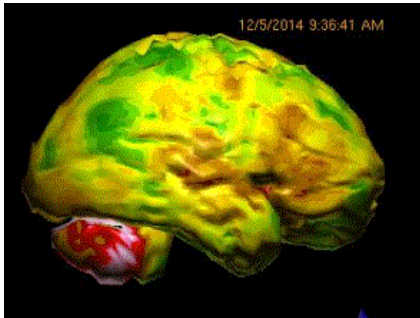


Patient 302

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**Patient 302:**

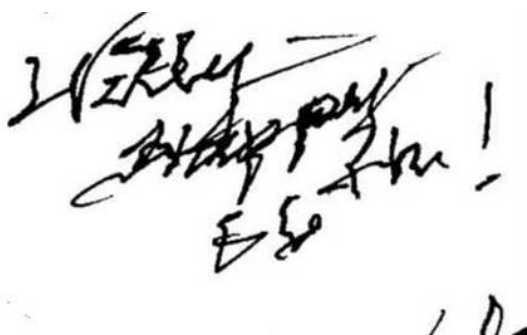
63 yo female with Parkinson's disease with 6 years duration. Patient was currently taking Sinemet at a dose of 25/100 distributed 4 times during the day.

<i>Before Treatment</i>		SPECT Scan
Headache		
Hyperarousal		
Sleep disturbance	✓	
Memory Problems		
Cognitive Problems		
Balance Problems	✓	
Depression		
Anxiety	✓	
Suicidal Ideation		
Irritability		
Tremor	✓	

**Gait & Balance:** Patient was unable to walk on a balance beam. Patient could not maintain position on a mini-trampoline when gently pushed. Gait was slow with slightly reduced arm movement.

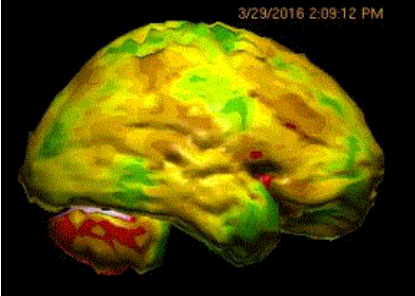
**Tremor:** Tremor was notable with writing and at rest.

Pre-Treatment



Patient received 26 treatments with Multi-Watt Infrared Laser over approximately 13 weeks. She returned after 6 months to have a second course of 10 treatments.

After treatment, the patient reported improved gait and reduced balance issues. She was able to walk on a balance beam to 6 feet. Ability to maintain position on a mini-trampoline was much better. Gait was more free with swinging of the arms. She greatly reduced her dose of Sinemet and her neurologist took her off of Sinemet after the second treatment course.

After Treatment		SPECT Scan
Headache		
Hyperarousal		
Sleep disturbance		
Memory Problems		
Cognitive Problems		
Balance Problems		
Depression		
Anxiety		
Suicidal Ideation		
Irritability		
Tremor		

Post-Treatment  
Willy -  
Happy  
66th!

Additional Quantitative Measures of Treatment Response (out of 17 measures)

# Neuro-Luminance introduces Multi-Watt Infrared Laser Therapy (NILT) which activates the brain's own repair mechanisms in a powerful way never before harnessed in medicine.



**The Problem:** Many of the disorders of the brain seem to have no treatment - traumatic brain injury (TBI), concussion/CTE, Parkinson's disease, and Alzheimer's disease to name a few. Current medical care seems limited to partial symptom-related relief using a combination of pharmaceuticals and rest.

**Currently, there are no effective treatments for chronic TBI:** After the acute injury or following multiple concussions, medical science offers little help. Similarly, there are no effective treatments for Alzheimer's disease, dementia, or Parkinson's disease. Depression and drug addiction are major health problems with limited success using the treatments currently available. The problems are only getting worse.

**Life Changing:** Neuro-Luminance™ developed, licensed and patented a revolutionary new laser technology for the treatment of brain injuries and diseases. We are building a nationwide network of clinics, as well as licensing our patented protocol to approved facilities like universities, sports teams, and medical centers in order to provide services to the millions of Americans impacted by TBI/CTE, depression, PTSD, dementia, Alzheimer's disease, and Parkinson's disease. We utilize a multi-faceted integrative treatment program with our patented protocols and cutting-edge scientific breakthroughs.

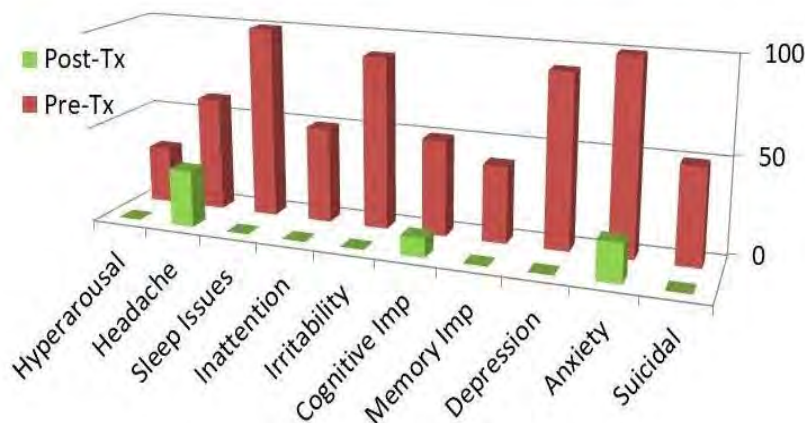


**Sports:** Jason hit a tree while mountain biking and broke his helmet. He went from being a straight-A student to failing all his classes. He was angry all the time, alienated his family, and lost his girlfriend. Then he got multi-Watt NILT. Within months, he is the kind, respectful, and happy guy he was before the accident and he is getting A's in college.

**Veterans:** Kyle was a bomb expert in combat and experienced 12 IED explosions. He was depressed, suicidal, angry, couldn't sleep and couldn't think. He was on the verge of losing his marriage. Then he came to Neuro-Luminance and was treated with multi-Watt NILT. His symptoms resolved. He saved his marriage and he started a new career.

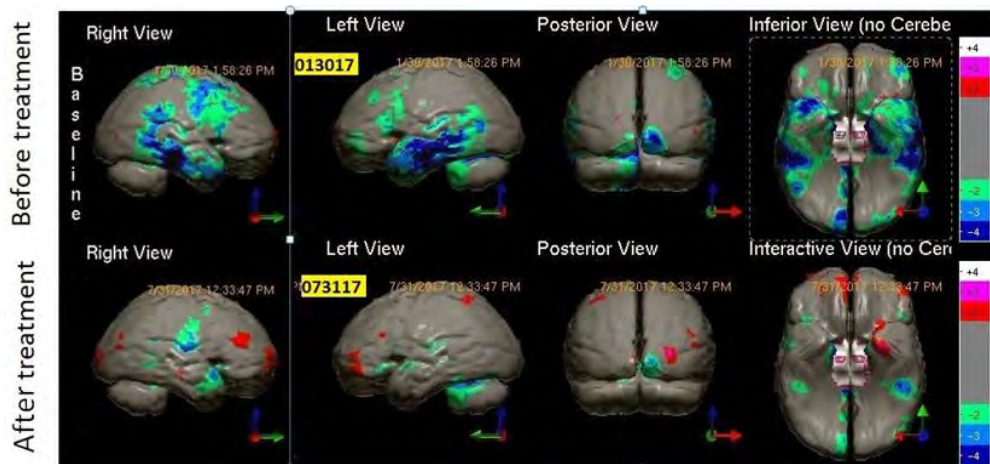


## Results You Can See:



Patients with TBI often experience sleep disruption, anxiety, depression, memory problems and other symptoms. Here you can see the improvement in symptoms after Neuro-Luminance multi-Watt laser therapy. Treatments are tailored to the specific needs of each patient. Available services will include: infrared light treatments, low dose ketamine infusion therapy, pulsed electromagnetic frequency devices, exercise programs, and nutraceuticals.

A SPECT functional brain scan of a patient with brain injury after falling from truck at freeway speeds. Areas of injury and reduced function are shown in green, blue, and dark blue before treatment. After treatment, marked improvement in brain function can be seen which correlated with the patient's clinical improvement.

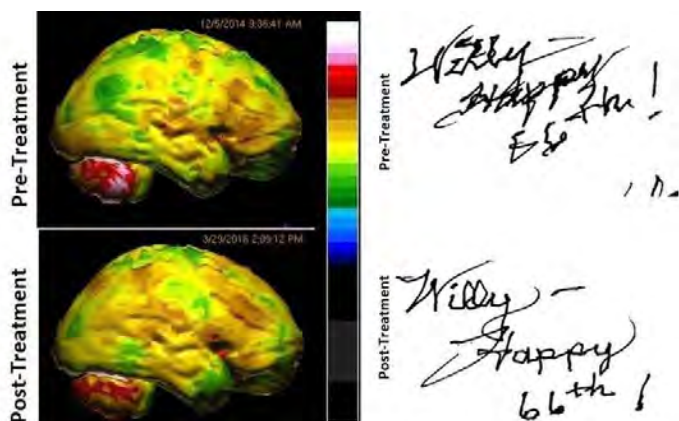


Neuro-Luminance™ has the *only patented treatment worldwide* which shows actual brain tissue regrowth and neurogenesis. We also developed a method of augmenting the infrared laser treatment with a second powerful activator of neurogenesis. This synergistic combination is patented.

**Clinicians' Endorsements:** "he was three years post-stroke and unable to work. After NILT treatments, he is able to go back to work as a nurse..." – A. Harris MD

- "never saw an injury respond so quickly..." – B. Baldwin DC

## Cutting-Edge Research and Development:



Here is a SPECT scan of a patient with Parkinson's disease before and after treatment. Areas of decreased function appear in green and show improvement after treatment. Handwriting sample of the same patient before and after treatment.

Virtually 100% of patients afflicted with TBI have seen improvement. Similarly, 92% of patients with depression found relief with Neuro-Luminance multi-Watt laser therapy. Studies of TBI, Parkinson's disease, and dementia are planned or being implemented.

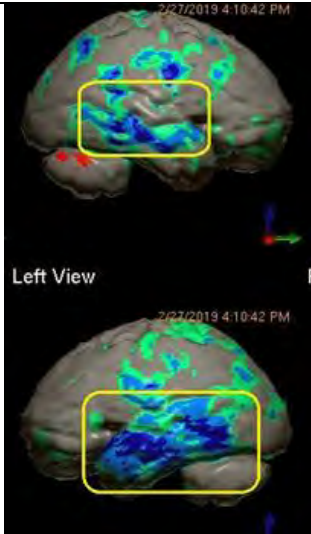


Patient 001

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**Patient 001:**

19 yo male with history of TBI due to being struck in the head with a baseball during a semi-professional game - 3 years prior to treatment.

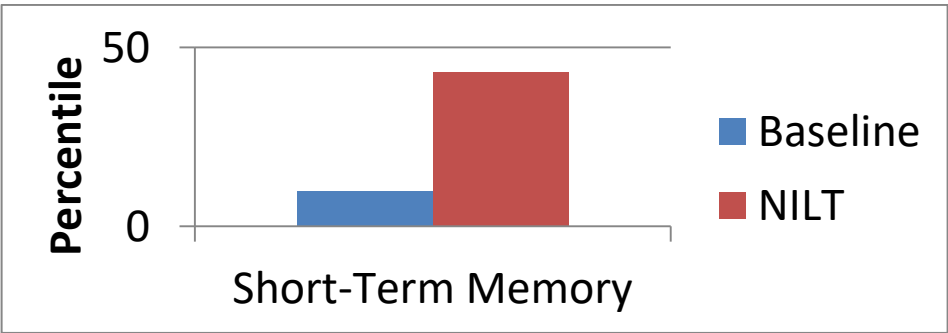
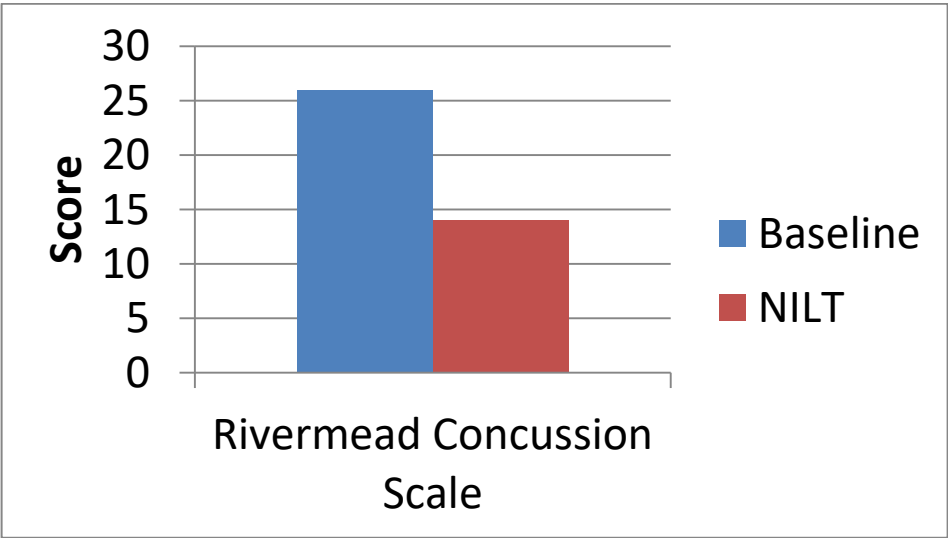
<i><b>Before Treatment</b></i>		<b>SPECT Scan</b>
Headache	✓	
Hyperarousal	✓	
Sleep disturbance	✓	
Memory Problems	✓	
Cognitive Problems	✓	
Balance Problems	✓	
Depression	✓	
Anxiety	✓	
Suicidal Ideation	✓	
Irritability	✓	

**Patient received 20 treatments with Multi-Watt Infrared Laser over approximately 9 weeks.**

After treatment, the patient reported marked subjective improvement. “My symptoms are way better. I am working three jobs now!” Most symptoms resolved, except sleep disturbance, headache, and mild anxiety.

<i><b>After Treatment</b></i>		<b>SPECT Scan</b>
Headache	✓	ND
Hyperarousal		
Sleep disturbance	✓	
Memory Problems		
Cognitive Problems		
Balance Problems		
Depression		
Anxiety	✓	
Suicidal Ideation		
Irritability		

Additional Quantitative Measures of Treatment Response (out of 17 measures)

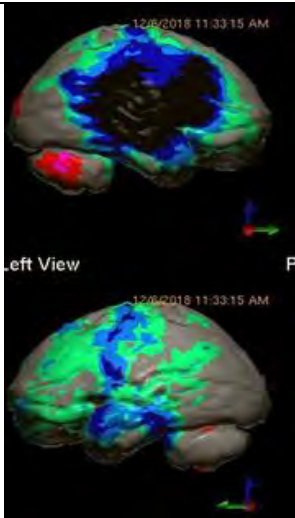


Patient 002

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**Patient 002:**

47 yo male with history of TBI due to motor vehicle accident with secondary stroke. Unable to work after accident which occurred over 4 years prior to treatment.

<i><b>Before Treatment</b></i>		<b>SPECT Scan</b>	
Headache			
Hyperarousal			
Sleep disturbance	✓		
Memory Problems	✓		
Cognitive Problems	✓		
Balance Problems	✓		
Depression	✓		
Anxiety	✓		
Suicidal Ideation			
Irritability			

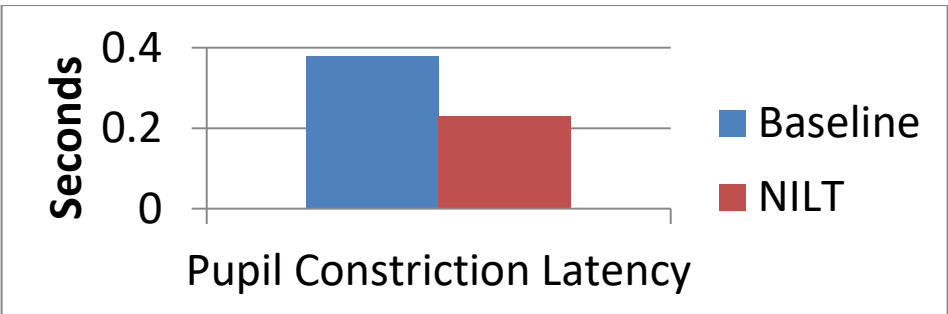
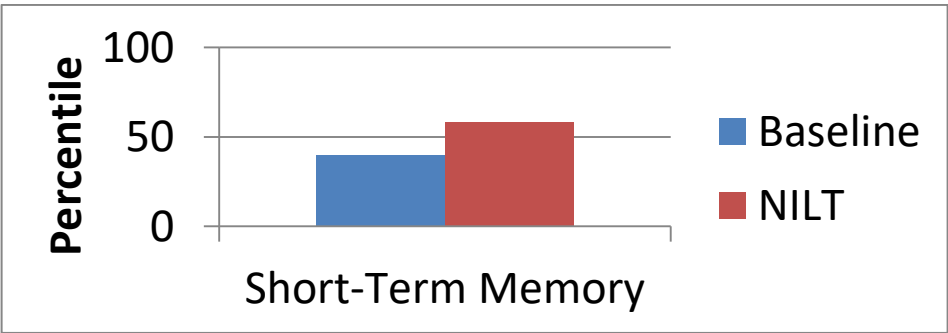
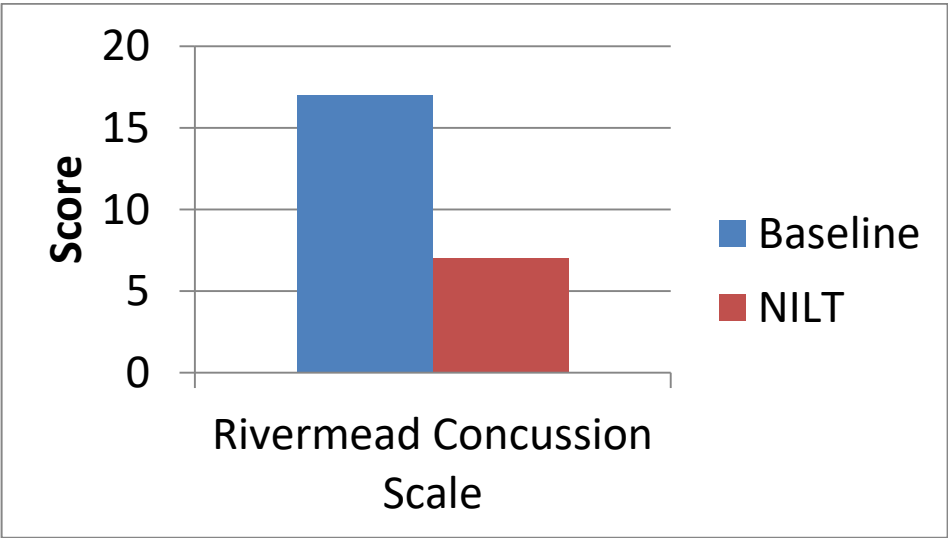
**Patient received 10 treatments with Multi-Watt Infrared Laser over approximately 7 weeks.**

After treatment, the patient reported marked subjective improvement. “I have been able to go back to work. This worked great.” Most symptoms resolved, except sleep disturbance.

<i><b>After Treatment</b></i>		<b>SPECT Scan</b>	
Headache		ND	
Hyperarousal			
Sleep disturbance	✓		
Memory Problems			
Cognitive Problems			
Balance Problems			
Depression			
Anxiety			
Suicidal Ideation			
Irritability			

Patient 002

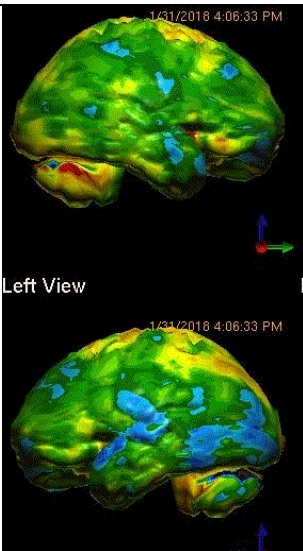
**Additional Quantitative Measures of Treatment Response (out of 17 measures)**





**Patient 003:**

41 yo male with history of TBI due to motor vehicle accident which occurred 14 years prior to treatment. Patient was in a coma for two weeks after the accident and was in outpatient rehabilitation for five months. Nonetheless, he has persistent symptoms, including headache, light sensitivity, slowed processing speed and other challenges.

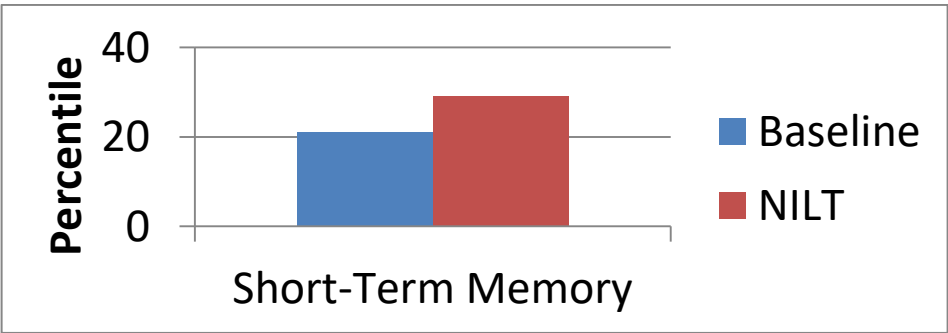
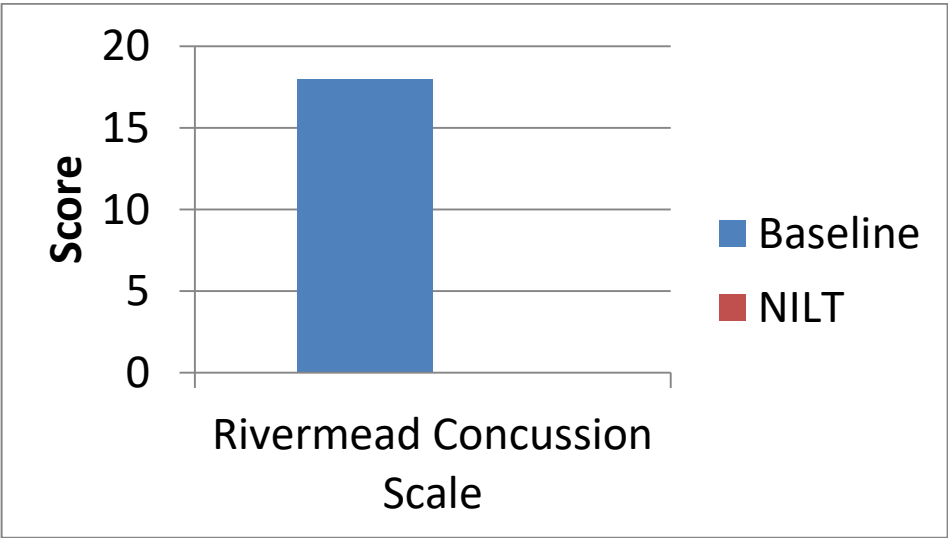
<i>Before Treatment</i>		<b>SPECT Scan</b>	
Headache	✓		
Hyperarousal			
Sleep disturbance			
Memory Problems	✓		
Cognitive Problems	✓		
Balance Problems			
Depression			
Anxiety	✓		
Suicidal Ideation			
Irritability			

**Patient received 20 treatments with Multi-Watt Infrared Laser over approximately 52 weeks.**

After treatment, the patient reported marked improvement in symptoms. He has few residual symptoms.

<i>After Treatment</i>		<b>SPECT Scan</b>	
Headache		ND	
Hyperarousal			
Sleep disturbance			
Memory Problems	✓		
Cognitive Problems			
Balance Problems			
Depression			
Anxiety			
Suicidal Ideation			
Irritability			

Additional Quantitative Measures of Treatment Response (out of 17 measures)

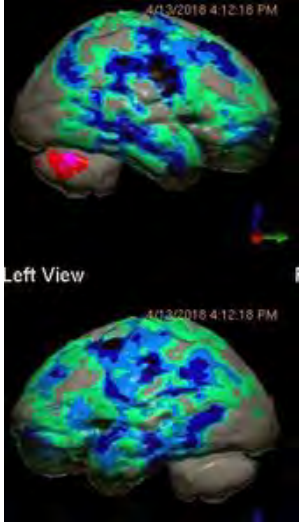


Patient 004

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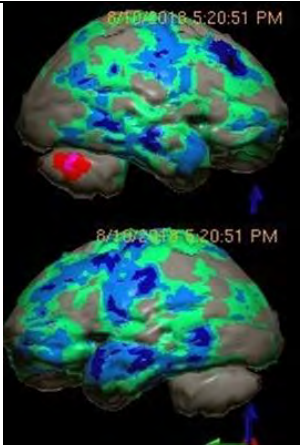
**Patient 004:**

46 yo female with history of TBI due to motor vehicle accident 2 weeks prior to treatment.

<i>Before Treatment</i>		<b>SPECT Scan</b>	
Headache	✓		
Hyperarousal			
Sleep disturbance	✓		
Memory Problems	✓		
Cognitive Problems	✓		
Balance Problems			
Depression	✓		
Anxiety	✓		
Suicidal Ideation			
Irritability	✓		

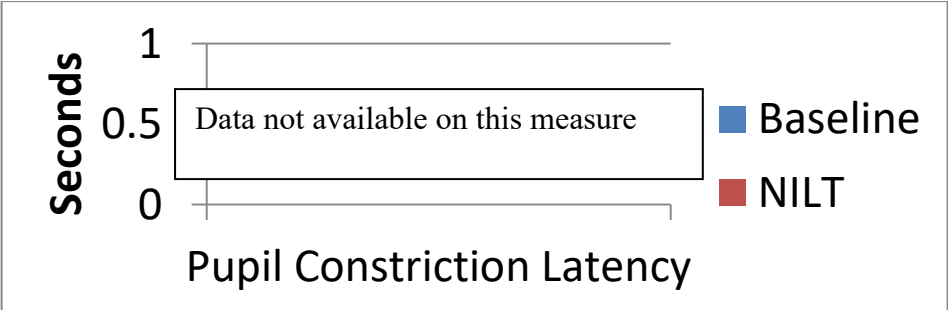
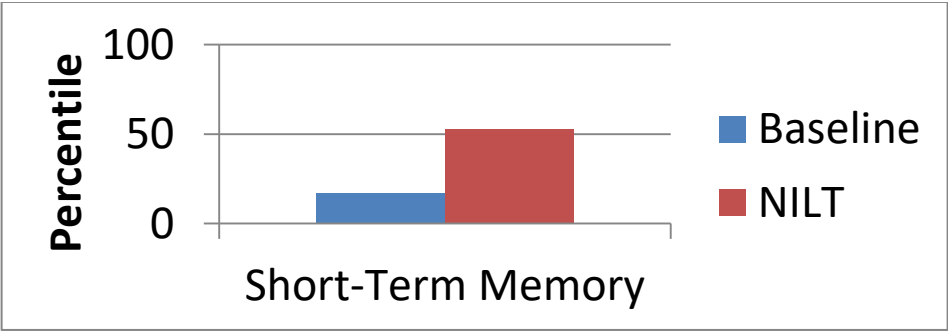
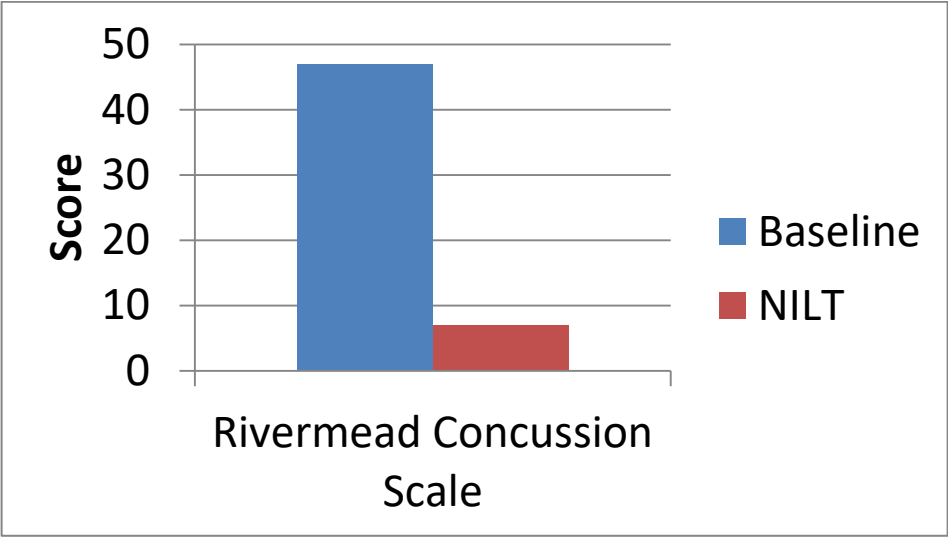
**Patient received 20 treatments with Multi-Watt Infrared Laser over approximately 9 weeks.**

After treatment, the patient reported marked subjective improvement. “I have been able to go back to work. This worked great.” Most symptoms resolved, except sleep disturbance.

<i>After Treatment</i>		<b>SPECT Scan</b>	
Headache			
Hyperarousal			
Sleep disturbance	✓		
Memory Problems			
Cognitive Problems			
Balance Problems			
Depression			
Anxiety			
Suicidal Ideation			
Irritability			

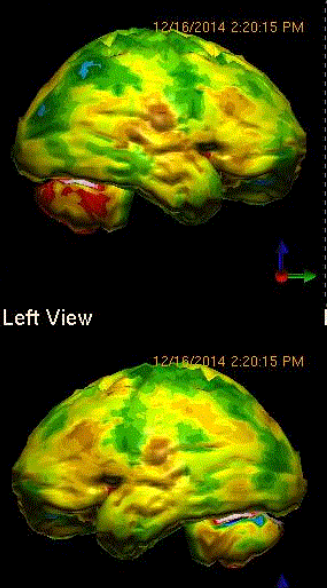
Patient 004

**Additional Quantitative Measures of Treatment Response (out of 17 measures)**



**Patient 005:**

18 yo male with history of TBI due to mountain biking accident in which his head hit a tree so hard that it broke his helmet. He was a straight-A student and about to enter college. After the accident, his personality changed. He was irritable and violent. His girlfriend broke up with him. When he started college, he was failing all of his classes. The accident occurred nine months prior to treatment.

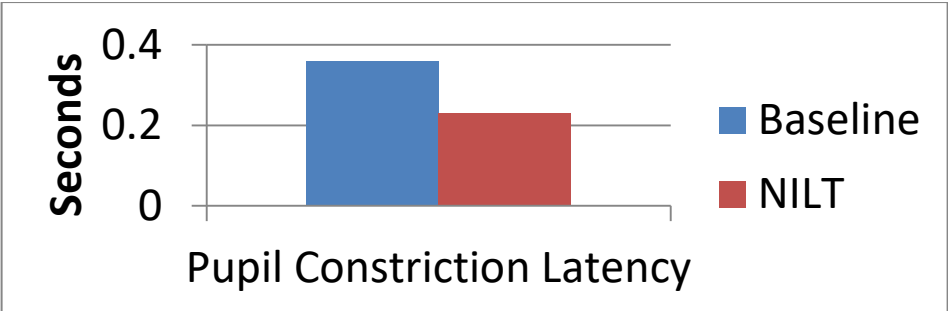
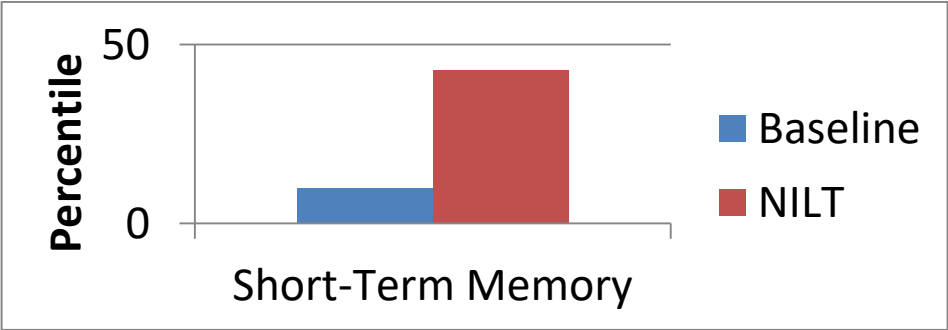
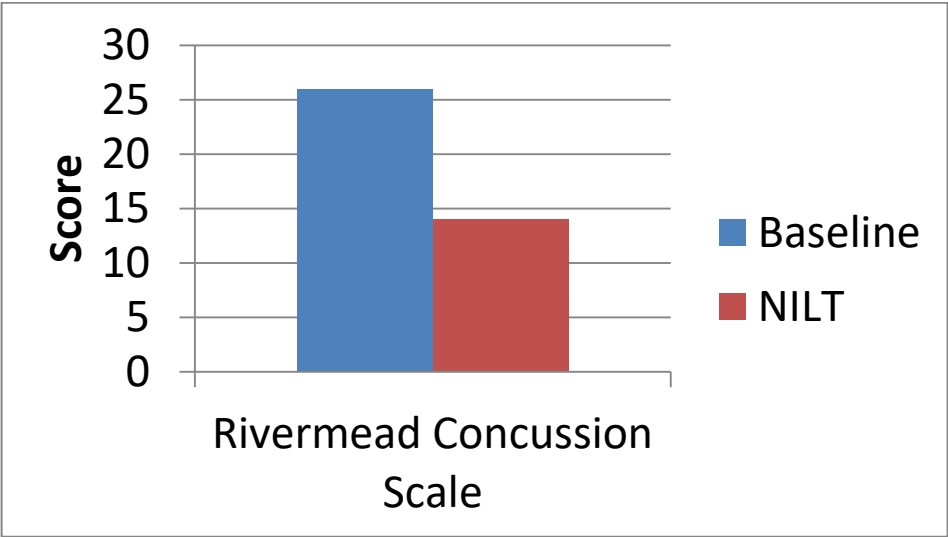
<i><b>Before Treatment</b></i>		<b>SPECT Scan</b>	
Headache	✓		
Hyperarousal			
Sleep disturbance	✓		
Memory Problems	✓		
Cognitive Problems	✓		
Balance Problems			
Depression	✓		
Anxiety			
Suicidal Ideation			
Irritability	✓		

**Patient received 20 treatments with Multi-Watt Infrared Laser over approximately 9 weeks.**

After treatment, the patient reported only modest subjective improvement. However, his parents saw a dramatic improvement in mood and outlook. His grades improved to all A's in his college courses.

<i><b>After Treatment</b></i>		<b>SPECT Scan</b>	
Headache	✓	ND	
Hyperarousal			
Sleep disturbance	✓		
Memory Problems			
Cognitive Problems			
Balance Problems			
Depression			
Anxiety	✓		
Suicidal Ideation			
Irritability			

Additional Quantitative Measures of Treatment Response (out of 17 measures)



**Patient 006:**

27 yo female with history of concussion after striking her head on a steel beam at work. There was no loss of consciousness, but the patient had headache, nausea, and light sensitivity within hours. Patient was treated one week after the injury.

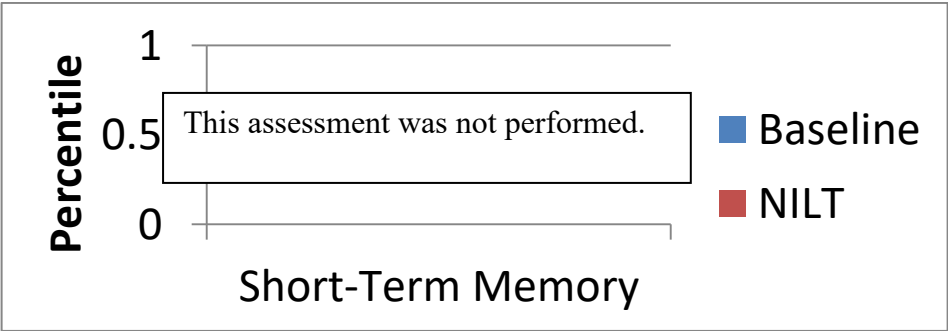
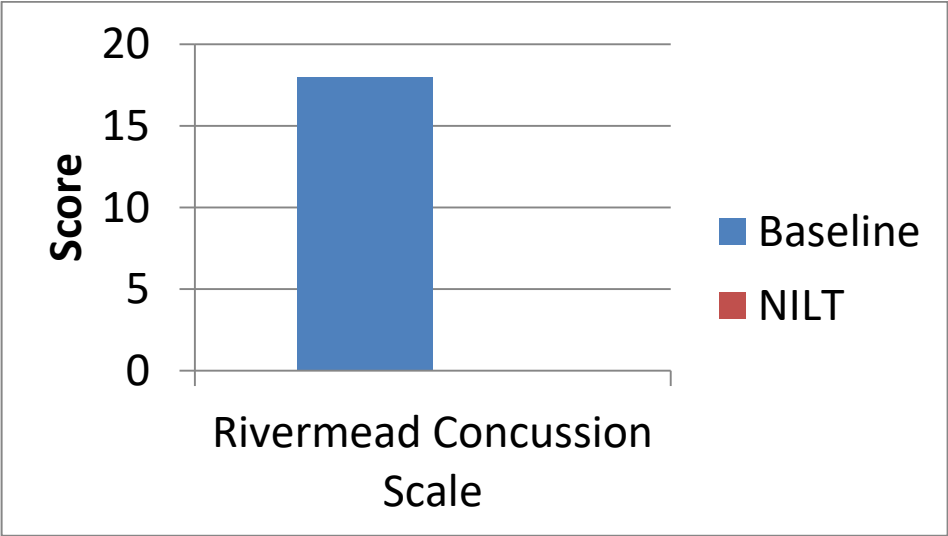
<i>Before Treatment</i>		<b>SPECT Scan</b>
Headache	✓	ND
Hyperarousal		
Sleep disturbance	✓	
Memory Problems		
Cognitive Problems	✓	
Balance Problems		
Depression		
Anxiety		
Suicidal Ideation		
Irritability	✓	

**Patient received 5 treatments with Multi-Watt Infrared Laser over approximately 2 weeks.**

After treatment, the patient reported marked subjective improvement. “That is sooo cool! I slept better after the first treatment and my symptoms are all gone.”

<i>After Treatment</i>		<b>SPECT Scan</b>
Headache		ND
Hyperarousal		
Sleep disturbance		
Memory Problems		
Cognitive Problems		
Balance Problems		
Depression		
Anxiety		
Suicidal Ideation		
Irritability		

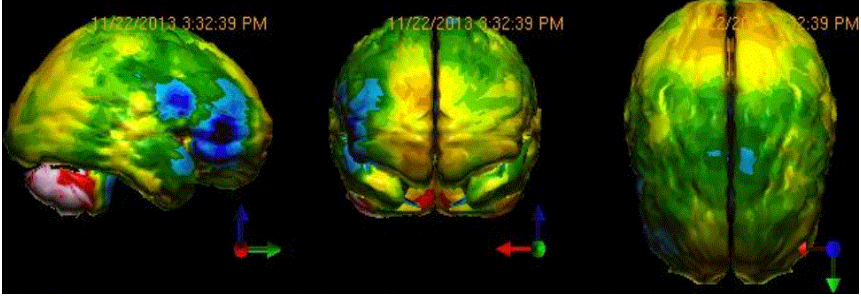
Additional Quantitative Measures of Treatment Response (out of 17 measures)





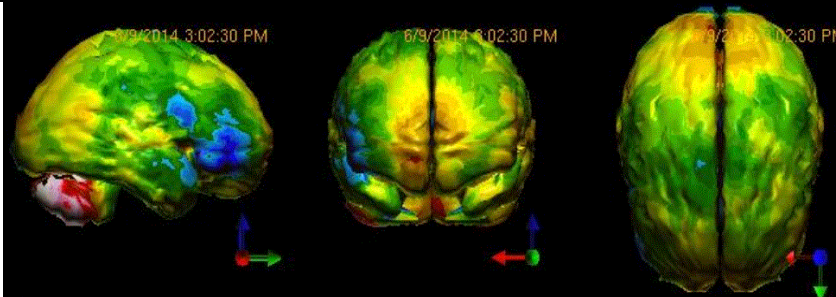
**Patient 007:**

55 yo male with history of TBI as a result of being struck by a motor vehicle while serving in active military duty. Patient was in a coma for 8 weeks and in rehabilitation for 4 months. He was scanned and treated 30 years after the accident.

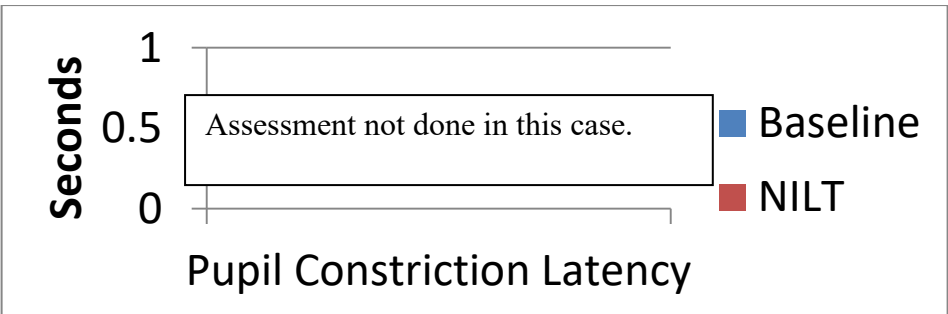
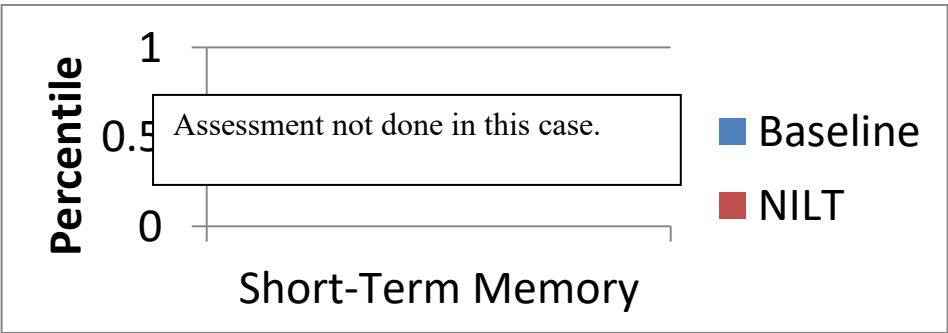
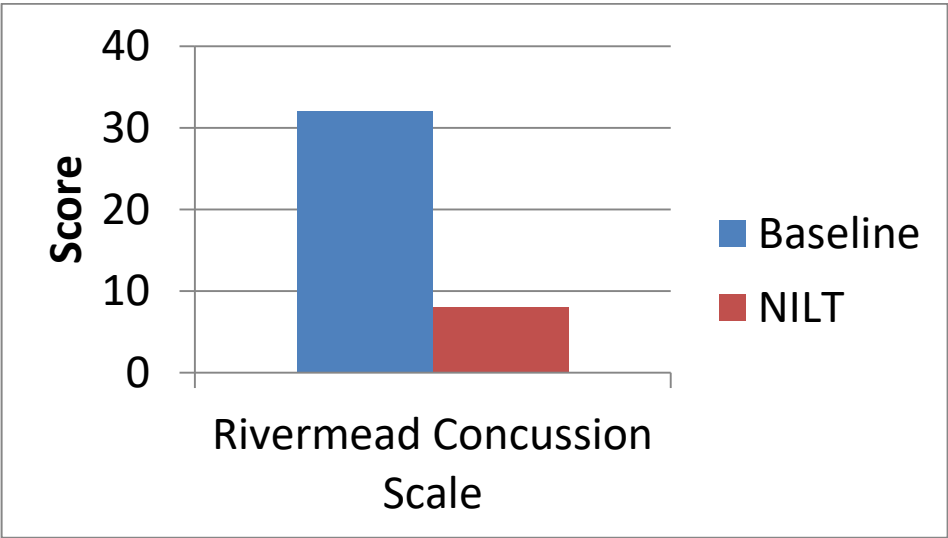
<i>Before Treatment</i>		<b>SPECT Scan</b>		
Headache	✓			
Hyperarousal	✓			
Sleep disturbance	✓			
Memory Problems	✓			
Cognitive Problems	✓			
Balance Problems	✓			
Depression	✓			
Anxiety				
Suicidal Ideation				
Irritability	✓			
Dysarthric speech	✓			

**Patient received 20 treatments with Multi-Watt Infrared Laser over approximately 9 weeks.**

After treatment, the patient was able to speak. He reported feeling much better – no longer had headaches, sleep disturbance, balance problems, or irritability. He reported he felt less anxious.

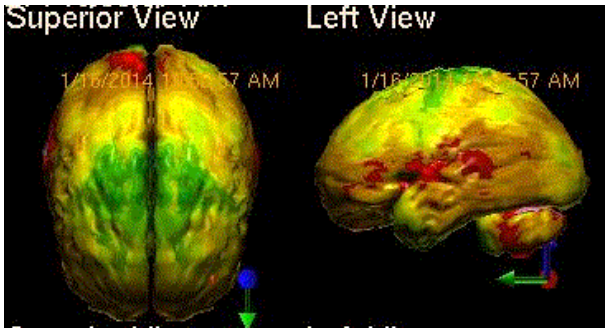
<i>After Treatment</i>		<b>SPECT Scan</b>		
Headache				
Hyperarousal				
Sleep disturbance				
Memory Problems	✓			
Cognitive Problems	✓			
Balance Problems				
Depression				
Anxiety				
Suicidal Ideation				
Irritability				
Dysarthric speech				

Additional Quantitative Measures of Treatment Response (out of 17 measures)



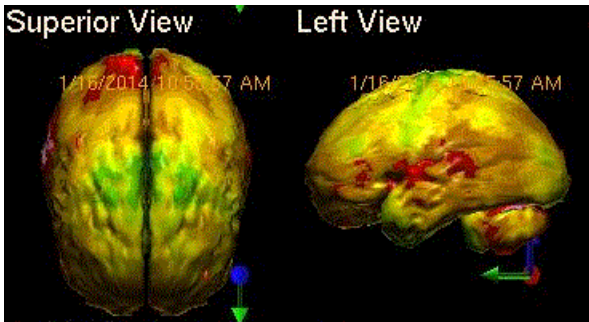
**Patient 008:**

43 yo female police officer with history of TBI in the line of duty. She experienced crippling headaches and difficulty concentrating. She was placed on leave. Over time, she became depressed because she could not work.

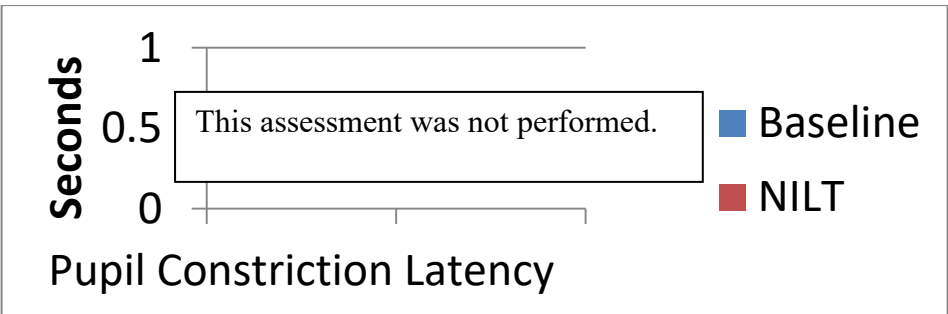
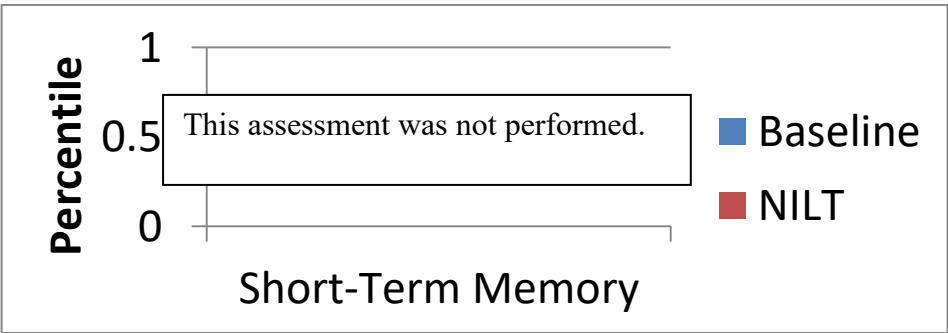
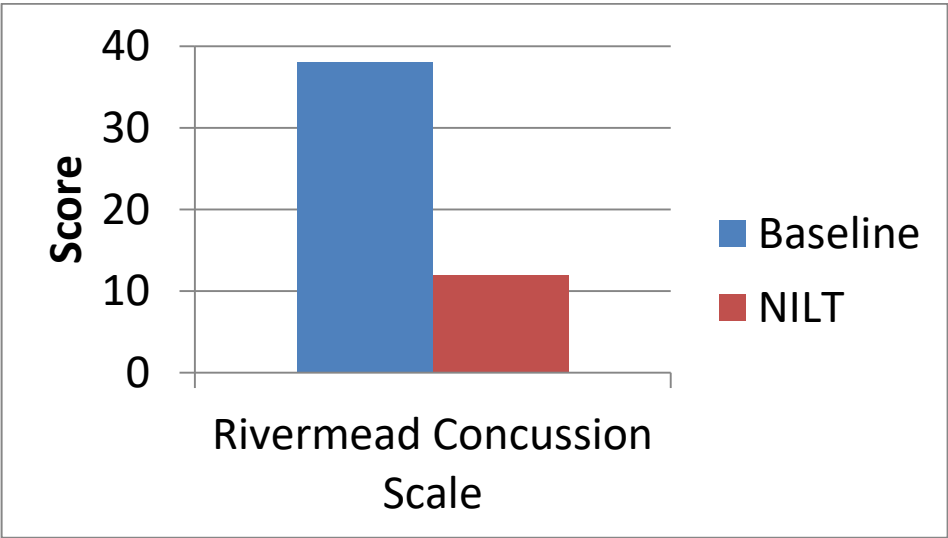
<i>Before Treatment</i>		SPECT Scan
Headache	✓	
Hyperarousal		
Sleep disturbance	✓	
Memory Problems		
Cognitive Problems	✓	
Balance Problems		
Depression	✓	
Anxiety	✓	
Suicidal Ideation	✓	
Irritability	✓	

**Patient received 38 treatments with Multi-Watt Infrared Laser over approximately 26 weeks.**

After treatment, the patient reported marked subjective improvement. She still experienced headaches by they were much less severe. Depression, anxiety, and other symptoms resolved.

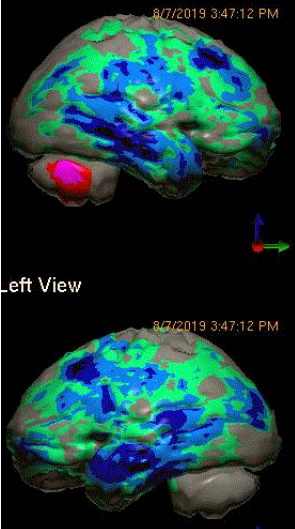
<i>After Treatment</i>		SPECT Scan
Headache	✓	
Hyperarousal		
Sleep disturbance		
Memory Problems		
Cognitive Problems		
Balance Problems		
Depression		
Anxiety		
Suicidal Ideation		
Irritability		

Additional Quantitative Measures of Treatment Response (out of 17 measures)



**Patient 009:**

54 yo female with history of TBI resulting from a motor vehicle accident. Patient had worsening symptoms over the first three weeks and sought treatment. However, her attorney and the insurance company did not want her to receive treatment until after the settlement. She did not receive treatment until two years after the accident.

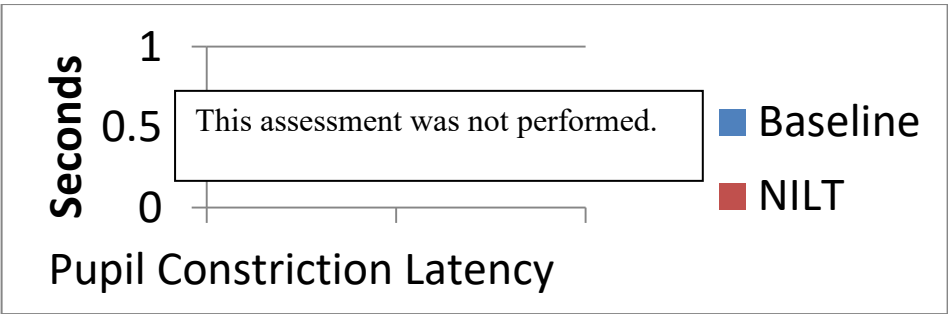
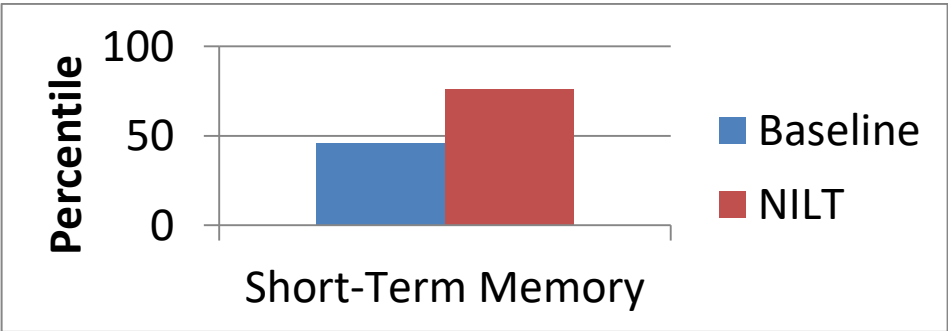
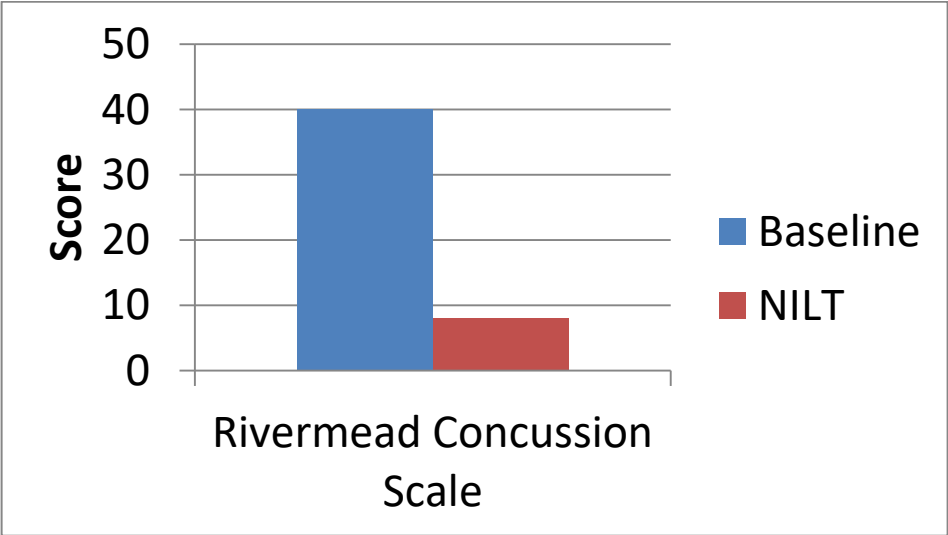
<i>Before Treatment</i>		<b>SPECT Scan</b>	
Headache	✓		
Hyperarousal			
Sleep disturbance	✓		
Memory Problems			
Cognitive Problems	✓		
Balance Problems	✓		
Depression	✓		
Anxiety	✓		
Suicidal Ideation			
Irritability	✓		

**Patient received 18 treatments with Multi-Watt Infrared Laser over approximately 10 weeks.**

After treatment, the patient reported marked subjective improvement. "I am doing so much better".

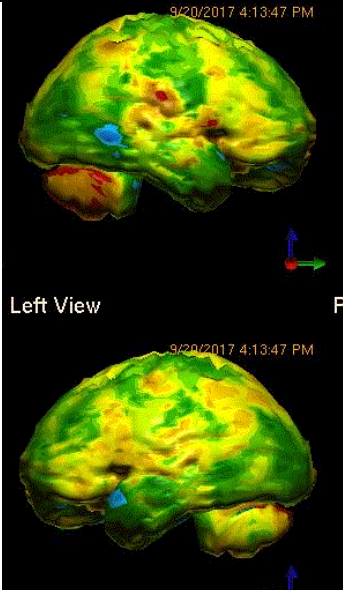
<i>After Treatment</i>		<b>SPECT Scan</b>	
Headache	✓	ND	
Hyperarousal			
Sleep disturbance			
Memory Problems	✓		
Cognitive Problems			
Balance Problems			
Depression			
Anxiety			
Suicidal Ideation			
Irritability			

Additional Quantitative Measures of Treatment Response (out of 17 measures)



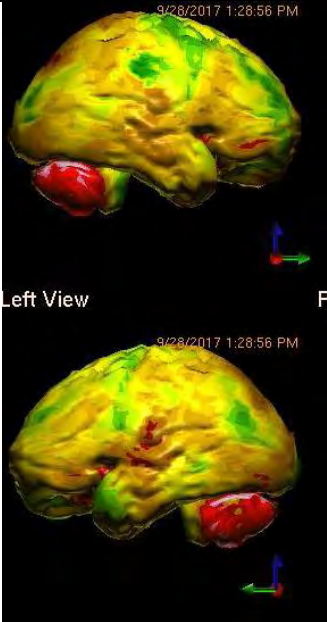
**Patient 010:**

23 yo male with history of TBI resulting from a motor vehicle accident. Patient had severe headache, light sensitivity, and was unable to attend school. Patient had to drop out of college and spent 6 months in the basement of parents' house. Patient was scanned and treated 18 months after the injury.

<i>Before Treatment</i>		<b>SPECT Scan</b>	
Headache	✓		
Hyperarousal			
Sleep disturbance	✓		
Memory Problems			
Cognitive Problems	✓		
Balance Problems			
Depression	✓		
Anxiety	✓		
Suicidal Ideation			
Irritability	✓		

**Patient received 20 treatments with Multi-Watt Infrared Laser over approximately 10 weeks.**

After treatment, the patient reported marked subjective improvement. Headache and photosensitivity resolved. Patient was able to return to college.

After Treatment		SPECT Scan	
Headache			
Hyperarousal			
Sleep disturbance			
Memory Problems			
Cognitive Problems			
Balance Problems			
Depression			
Anxiety			
Suicidal Ideation			
Irritability			

Additional Quantitative Measures of Treatment Response (out of 17 measures)

