International Clinical and Medical Case Reports Journal
Research Article (ISSN: 2832-5788)

The Problem with Trauma to the Brain/Mind

Leighton J Reynolds, PhD*

Treatment and Tools for Trauma in Los Angeles, CA, USA

Citation: *Reynolds LJ. The Problem with Trauma to the Brain/Mind. Int Clinc Med Case Rep Jour 2025;4(5):1-6.*

Received Date: 26 May, 2025**; Accepted Date:** 28 May, 2025**; Published Date:** 30 May, 2025

***Corresponding author:** Leighton J Reynolds, PHD, Treatment and Tools for Trauma in Los Angeles, CA, USA

ABSTRACT

This article explores the question of why so many patients with trauma/damage to the brain/mind---including TBI, strokes, seizures, infections, brain illnesses and diseases, major mental health problems and PTSD---are too often not getting better. And……is this actually a worldwide epidemic, because damage/trauma to the brain/mind is not understand as creating a cascading neurodegenerative progression in the brain. Not understanding that this neurodegenerative process is destructive to the entire brain/mind leading to a wide range of symptoms (physical, cognitive decline, social and emotional problems and sleep disturbances) robbing a person of a normal life. Two cases are presented illustrating this problem. And research is presented demonstrating that neuroscience understands the long-term, chronic effects of these injuries, illnesses and diseases. Finally, one answer to the question of why this readily available information and understanding is not being utilized very well at this time is presented.

Keywords: Trauma; Brain/Mind; Neuro-psychoanalysis; Brain injuries; Concussions and post-concussion syndrome; Baskets of symptoms

INTRODUCTION

A new patient recently shared the following with me during his first visit:
"Everyone keeps telling me that I should be better by now. Heck, it's been a year."

To be exact, a year since he was jumped by a motorcycle gang, brutality attack and found unconscious - approximately ½ hour later. Unfortunately, this was his second assault resulting in a serious concussion; the first was 10 years earlier. Following 2 surgeries to control the bleeding in his brain from the assault and unable to walk at that time, he began his recovery. A year later, when he came to see me, he was able to walk on his own, but was still struggling with many issues including:

- Sensitivity to light and sound
- Frequent memory glitches

- Balance problems
- Impulse control problems

- Chronic fatigue
- Daily physical pain
- Frequent difficulties with focus, concentration and attention
- Making frequent mental mistakes
- Sleep disturbances
- Frequent headaches
- Constant sore muscles
- Often feeling isolated and confused
- Daily issues with brain fog
- Almost daily issues with nausea
- Constant vision problems (everything looks like he is watching an old television set)
- Frequent mood swings
- Night terrors and always waking up tired, not refreshed.

This is a huge list of symptoms, which sadly I have come to expect with brain injured patients. Why is this?

A Disease Process, Not an Event

Several decades ago, Dr. Brent Masel published "Traumatic Brain Injuries: A Disease Process, Not an Event [1]." His article addressed the fact that brain injuries (different from all other injuries to the body) are not a single event that will heal with several weeks of rest. Rather, these injuries create a neurodegenerative disease progression in the brain. In 2023 I published "The Complex Architecture and Healing of Traumatic Brain Injuries," which explores the 4 architectures I believe the brain creates to deal with trauma to the brain/mind, but not successfully so [2]. In my experience, without treatment (more than just going home from the ER and resting for a week or two), this neurodegenerative progression cascades through the brain ending in Alzheimer's Disease, Parkinson's Disease, MS, Lou Gerig's Disease, CTE and dementia. All caused by trauma to the brain/mind in one form or another. Is medicine overlooking something here? In my opinion, yes, which leads us to the questions of what exactly medicine is overlooking here and why?

Thirdly, where does this leave us terms of treatment to the brain/mind? But before I answer this question, I want to include my experience that trauma to the brain/mind can also lead to psychosis and sociopathy (yes, sociopathy where the most significant factor is no conscience about whatever you do). This is powerful information, which I believe needs to be addressed by medicine, our legal system and by society and culture worldwide. And what then does medicine need to do to "see" these problems, the problems of trauma to the brain/mind?

I was always taught that traumatic experiences are behind all mental illness (see the important work of Dr. Allan Schore) [3]. While there are always exceptions to everything, I agree that the root causes of mental illness lie in

the experiences of childhood trauma (see ACE scales-Adverse Childhood Experiences). Why do we not recognize this? And why is it so difficult to see that damage/trauma to the brain/mind from sports, car crashes, falls and spills results in a lot more than "take a rest for a week or two and you will be fine?"

Several days ago, I was approached by a woman during a social gathering.

"Doctor, do you mind if I ask you a question?"

"Sure, go ahead."

"I have this problem with vertigo and it just won't go away."

"How long has this been a problem?"

"Well, probably for over a decade now."

"Have you ever had any head injuries?"

A pause……

"I was in a car accident about 12 years ago. And now that you are asking me, I did experience a lot of symptoms right after the accident."

"What kinds of symptoms?"

"I think you're right. My symptoms really started back then, right after the accident. I had a lot of vertigo and dizziness after the accident. I would lose my balance frequently. I had constant headaches. My memory was affected. Then the symptoms got better for a while, but now these symptoms are back. The headaches, the vertigo, having difficulties with my balance, getting tired so easily and my memory is really not that good anymore, like it used to be."

"Did anyone every mention to you that concussions are the beginning of a disease process and not a single event?"

"No one ever mention anything like that. I've been taking treatment for my ear crystals to work on my balance. But it hasn't really helped that much. In fact, the vertigo is worse than ever right now."

Over the past 9 years I have seen many cases just like this, especially from car accidents. If any MRI is done at all, it will only show structural damage, bleeding in the brain, an aneurysm or evidence of a TIA. It is important to find out this kind of information. But concussions are "horse of a different color," requiring an fMRI (a functional MRI), which is seldom if ever done. Yet there is more and more research information leading to the conclusion that damage to the brain/mind creates long-term chronic problems of a serious nature. Note the research below.

The Research

Neuroscience research is pointing us in this direction: PBI (primary brain injury) is defined as a sudden and profound injury, which is often very visible. But many persons who have sustain a PBI end up facing disability or death, through a SBI (secondary brain injury) that follows the initial insult to the brain/mind. And this is my major concern here, damage from a SBI. A SBI can lead to a complicated set of pathophysiological alterations including ischemia, cerebral hypoxia, excessive glutamate release, inflammation and is an important risk factor in the development of psychiatric illnesses [4]. And most important, a SBI can lead to a major decrease in an individual's ability to function in the world in the ways they did before the injury. This can quickly become a

tragic situation for the person with these kinds of injuries.

Looking further, given the fundamental role of the brain in orchestrating endocrine processes through the interactions among neurohormones, it is not surprising that structural and/or functional alterations following trauma to the brain/mind can lead to endocrine changes affecting the entire organism [5]. The key here is affecting the entire organism, because in my experience brain injuries are pervasive in the brain/mind. And unfortunately, this is seldom considered as the individual's symptoms expand rapidly.

Or a traumatic brain injury (and I would include all damage to the brain here) causes a direct central nervous system injury. With additional injuries that may (I find always) develop secondary to compression in the brain, disruptions of cerebral perfusion and changes in Na+ levels, all of which can result in edema or dehydration in the brain. In other words, more problems occur as a result of the original injury/damage through the SBI [6]!

Or this review aims to elucidate the mechanisms associated with the secondary injury cascade (because this is what is happening in the brain), in which there is an intense activation of glial cells, dysfunction of the glymphatic system, glutamatergic neurotoxicity and additional molecular and biochemical changes that lead to a neuroinflammatory process and oxidative stress. And this is associated with cognitive damage capable of lasting for an extended period of time [7].

Or the evidence shows that neuroinflammation causes and accelerates long-term neurodegenerative disease and plays a crucial role in the early development of chronic conditions including dementia [8].

And the constellation of post-injury cognitive and behavioral symptomatology suggests that these are the permanent effects of head injuries on neurotransmission [9].

DISCUSSION

Again and again, neuroscience research is demonstrating that there are crucial, long-term effects from trauma/damage to the brain/mind. What then is the resistance to understanding and working with the chronic effects of trauma to the brain/mind?

This is not an easy question to answer, because it involves perspective. And perspective is subjective for all of us. Understanding that trauma/injury to the brain/mind creates a chronic, long-term disease process in the brain, is very different from understanding that these are single events that can be treated using a reductionist, fragmented into specialties, drug treatment-based approach. As I have written elsewhere, it is more effective if medicine thinks in terms of "symptomatology, impairments and a healing ecology[10]." In other words, if medicine thinks "wider" in terms of its approach to treatment.

However, isn't our entire medical system set up in a manner than cannot see or entertain a "wider perspective." And isn't the current medical system set up to make sure that they are "doing something to the patient" to help them recover from their injury, illness or disease. The idea that effective healing involves a doctor-patient

relationship over time, short or long, does not appear very often on our current medical radar. I have found that it is crucial for patients with brain injury/trauma to be in a doctor-patient relationship because of their need for auxiliary ego organization. Trauma to the brain equals the individual's overall inability to process their world, both internally and externally. This is a very difficult and painful place to be. And it requires a lot of work in treatment, years in my experience, to change this such that the person can return to a normal life. As much as possible the life they had before.

CONCLUSION

In answer to my own question: what is the resistance to really treating brain trauma, the problem with trauma to the brain? Our current medical system is in no way set up to work with the "wider problems" presented by brain/mind injuries. Because it is reductionist in perspective (the cellular and molecular levels are what really count), fragmented into various specialties that seldom work together to understand the entire person and treatment is drug-based or technique based, rather than being healing based [10,11].

Finally, I believe there is a "call to action here." We need a better system, a more effective, wider approach to treating trauma and damage to the brain/mind. Over the past 9 years I have met too many patients who have sustained trauma to the brain/mind and their treatment has led them nowhere. In fact, because trauma to the brain/mind is in my experience always neurodegenerative, many people are worse off than before they began the treatment. Listed below is the protocol I use (individualized for each patient) to treat brain injuries. What I can share is that this protocol works every time, provided the patient is willing to remain in treatment. This is not easy work for either doctor or patient and patients do not always choose to "attach" to in-depth treatment. This approach to treating brain trauma takes way more time than our current medical system is willing to give it. I have found that it generally takes 2-3 years before a patient is able to return (at least mostly) to their former life. (See cases in "The Complex Architecture and Healing of Traumatic Brain Injuries, Cambridge Scholars Publishing 2023). But again, following the protocol I have designed, patients get better. They are able to recover their connection to the world that has been so seriously damaged and get their lives back!

Here is the protocol I use individualized for each patient:

- Nutrients and Supplements for the Brain
- A Total Immersion Daily Program for Recovery
- Stimulation to the Brain (I suggest music and art)
- Creating "flow experiences" every day
- Neuro-Psychoanalytic Sessions (2-5 times per week)
- Chiropractic Adjustments to keep the Nervous System Healthy. (all head injuries are also neck injuries)
- Daily Exercise for Creating Endorphins in the Brain
- Track Your Sleep and Dream Time (Apple Watch or the equivalent)
- Always Eat Healthy

REFERENCES

1. Masel BE, DeWitt DS. Traumatic Brain Injury: A Disease Process, Not an Event. J Neurotrauma. 2010;27(8):1529-1540.
2. Reynolds LJ. The Complex Architecture and Healing of Traumatic Brain Injuries. Cambridge Scholars Publishing. 2023.
3. Schore SA. on the Science of Psychotherapy.
4. Pearn SML, Niesman IR, Egawa J, et al. Pathophysiology Associated with Traumatic Brain Injury: Current Treatments and Potential Novel Therapeutics. Cellular Molecular Neurobiology. 2017;37(4):571-585.
5. Li M, Sirko S. Traumatic Brain Injury: At the Crossroads of Neuropathology and Common Metabolic Endocrinopathies. J Clin Med. 2018;7(3):59
6. Trans V, Flores J, Sheldon M, et al. Fluid and Electrolyte Disorders in Traumatic Brain Injuries: Clinical Implications and Management Strategies. J Clin Med. 2025;14(3):765.
7. Kursancue ACS, Faller CJ, Bortoluzzi DP, et al. Neuroinflammatory Response in Traumatic Brain Injury: An Update. Neurochem Res. 2025;50.
8. Lyman M, Lloyd DG, Ji X, et al. Neuroinflammation: The Role and Consequences. Neurosci Res. 2014:791-812.
9. Mc Guire JL. Neurotransmitter Changes After Traumatic Brain Injury: An Update for New Treatment Strategies. Molecular Psychiatry. 2019;24:995-1012.
10. Reynolds LJ. Thinking Differently: The Case for Symptomatology, Impairments and a Healing Ecology. Int Clin, Med Case Reports J. 2024;3(11):1-8.
11. Reynolds LJ. The Case for Symptomatology, Impairments and a Healing Ecology. J Neuro Psychiatric Reports. 2024.