

MAJ (RET) Ben Richards and his HBOT Treatment Experience

By Ben Richards, B.S., M.A., Major (RET), US Army

During the spring and summer of 2007, I (MAJ Ben Richards) had the privilege of leading Bronco Troop, 1-14 CAV, a Stryker-equipped cavalry troop, during intense combat operations in and around Baqubah, Iraq. Bronco Troop was blessed with the deep bench of top-quality Noncommissioned Officers that distinguishes great units from good ones. Five of the six officers in the troop were West Pointers. At one point, all six of us were captains and the experience paid dividends in a challenging operating environment.

At the peak of operations, a new second lieutenant arrived straight from the basic course to take over a scout platoon. I greeted him shortly after he arrived at our dilapidated combat outpost and told him we would have a Combat Action Badge (CAB) for him the next day. His face showed that he clearly thought I was joking. By the following evening, he had survived an IED hit to his Stryker, been in two firefights and earned his CAB. The rest of us had earned our CABs on our first day in town two months earlier as well. A few weeks later he was wounded by a grenade fragment while leading his platoon in a dismounted close combat assault on an al Qaeda fighting

position. The courage, competence and character of these young officers was in every way a credit to our alma mater and a testimony to West Point's continuing role as the corner stone of our Nation's defense.

During those several months of combat operations, ninety percent of my men hit at least one IED – often more than one. In May 2007, a suicide-bomber driving a sedan laden with explosives rammed into my Stryker and destroyed it. A few weeks later we hit a second 'plain vanilla' IED buried in the road that damaged our second Stryker sufficiently that it was later 'coded out' as not being worth fully repairing. After each hit, we got back up and returned to the fight because we knew that there was going to be a fight and we fought as a team, even when it hurt.

On returning home I, like so many others, began a personal battle against an enemy that I could not see, could not anticipate and was neither trained nor equipped to combat. Six months after arriving back at Fort Lewis, I was diagnosed with Post Traumatic Stress Disorder (PTSD). To be honest, I only sought help after being 'command directed' by my wife. At that time, I was



Ben Richards' Stryker armored vehicle after being hit by a suicide vehicle-borne IED in Baqubah, Iraq in May 2013. Richards and his crew survived the attack, but all with TBIs. Photo Credit: Ben Richards

not intimidated by PTSD. I had every confidence that it was something I could beat. I was surprised and not a little embarrassed that I had it all. I gave it a year, tops. By then I would be fully back in the saddle. The extent of damage to my brain caused by the pair of mild traumatic brain injuries was not recognized until more than three years after the injuries and was not fully diagnosed until yet another year had passed.

While I was serving in Iraq, I was extremely fortunate to be selected by the History Department at the US Military Academy West Point to return for a tour as an instructor. I arrived in the summer of 2010 in pretty rough shape. Less than a year into

the assignment, I collapsed under the weight of disabling chronic pain, memory problems, cognitive deficits, sleep deprivation, drugs (the legal kind), emotional problems, and all the 'noise' that often accompanies invisible injuries. At one point, heavily under the influence of prescription medications, I even seriously considered taking my own life.

West Point was up to the challenge. The History Department leadership kept me in the department so that they could personally oversee my care. My fellow instructors, both civilian and military, took on the burden of my workload without complaint, as they would have carried me, my rifle and

my ruck to the CASEVAC point. I am sure theirs was a long, hard walk out. It was real leadership, at real personal cost and sacrifice.

The Department's Colonels breached every administrative and bureaucratic obstacle to ensure I literally received the best care available in the Department of Defense for my injury profile. When it turned out that the best care was not enough and after they had done everything within their power to assure my future well-being, they 'fare-welled' me with honors and fanfare well beyond those merited by a junior major.

The day I took off my uniform for the last time was one of the saddest in my life. I saw only an empty husk of the new cadet who had marched in the rain on R-Day eighteen years earlier and so full of the potential that enables a first-year cadet to sit with generals and presidents, while a second lieutenant hides from majors in the motor pool. I was permanently broken. The natural processes of neural plasticity had run their course and come up wanting at the end. Medications could only partially mitigate the pain while causing new problems of their own. The results of evidence-based psychotherapies became part of the new canon of evidence that those therapies, so promising for victims of rape and traffic accidents, are disappointingly much less effective against combat-related PTSD. Acceptance and accommodation were all that was left to aspire to.

It was at that moment of hopelessness that the Long Gray Line extended its hand to drag me back from the edge. John Batiste, class of '74, a retired general officer and president of the Veteran-serving non-profit, Stand for the Troops, founded by the legendary COL David Hackworth (SFTT.org), hunted me down to deliver a life-changing message.

"We will help you," he told me, and "by that, I mean really help you and not in the sense of providing a palliative weekend retreat or the cathartic commiseration of other wounded warriors."

Had John not been a graduate and a Soldier of such well-known reputation, I would have hung up the phone. I did not have the hope left to waste on vain promises with unlikely outcomes, but because John was who he was, I gave him the time. He gave me my life back.

The problem of invisible wounds and injuries was one that merited a Manhattan Project. Instead, it had the Army Medical Corps bureaucracy that ran Walter Reed into scandal, regularly abused invisibly wounded warriors exiled to Warrior Transition Units, and never seemed to get past the word excuse, so clearly bookmarked in their dictionary, to the word execution. It was a corps of capable and dedicated medical operators who did not deserve their uninspired and ineffective leaders. Their obvious failures were difficult for me to understand after having spent a career in the company of men and women I would follow anywhere. And then there was the VA...

Unwilling to accept defeat at the hands of ineffectual bureaucracies, John and SFTT recruited a team of medical experts and began scouring the country for new and more effective approaches to treating traumatic brain injury (TBI) and PTSD. Their rescue mission had led them to Doctor Paul Harch, a practitioner of Hyperbaric Medicine at the Louisiana State University Medical School in New Orleans. Harch, John said, would treat me.

Dr. Harch had become the point man for the league of medical practitioners and researchers using Hyperbaric Oxygen Therapy to treat brain damage caused by TBIs. By the time I arrived in New Orleans, these practitioners had already treated over a hundred invisibly wounded warriors, as well as several well-known NFL football players to include the legendary quarterback, Joe Namath. Dr. Harch had personally completed a research study with 20 Soldiers and Marines, whose brains had been damaged by combat-related TBIs. The results were unprecedented.

When I was being evaluated by the military's top neurologists in 2011, the prevailing medical wisdom was that modern medicine could do very little, if anything, to help a brain heal after being damaged by a mild TBI. There was a period of natural healing of up to several years, but at four years post-injury, they had no expectation that my brain would improve and many reasons to suspect that it would instead begin to degrade. I arrived in New Orleans with repressed expectations.

I found Dr. Paul Harch to be a dedicated and innovative professional. He exhibited a reserved persona that I soon found to be a façade masking a burning passion for healing and especially for healing those that hope had passed by. Harch is a man of great moral courage, conviction and compassion; a classical gentleman endowed with the noblesse oblige of an heir of a great inheritance of character and natural capacity.

Dr. Harch and his colleagues had pioneered a protocol for using hyperbaric oxygen therapy (HBOT) to treat brain injuries. The medicinal effects of oxygen at higher than atmospheric pressure have been recognized empirically for over a century. It is perhaps best known as a treatment for diving injuries. It is also widely used for healing hard-to-treat wounds and is approved by the FDA for over a dozen different medical conditions. Using HBOT to treat brain injuries, like most of the prescription medications I had been prescribed by the DOD and VA, is considered off-label, but its safety has been recognized by the Institute of Medicine.

Treatment consisted of 40 one-hour 'dives' in a Plexiglas tank that I would describe as similar to a torpedo tube. These were conducted at a rate of one dive, sometimes two, a day. The tube is filled with 100 percent oxygen, which is then pressurized to 1.5 atmospheres. Protocols for wound healing and dive injuries use higher pressures. The pressure loads oxygen into the blood stream like carbonation in an unopened can of soda.



Ben Richards with his family in 2017. The ability to build and maintain meaningful social relationships has been one of the most important treatment outcomes. Photo Credit: Ben Richards

The introduction of the extra oxygen into the brain initiates a cascade of chemical interactions that are good for you. The end result is the creation of new blood vessels (angiogenesis) and the repair or regrowth of brain cells.

Before I began treatment, we did a SPECT neuro-imaging scan of my brain. A SPECT scan uses an injective radioactive agent to image blood flow in the brain. It is one of the more sensitive imaging tools for detecting brain damage caused by mild traumatic brain injuries (mTBIs) and in many cases, is superior to CT or MRI scans, especially if more than a few months have elapsed since the time of injury. The images showed the poor blood perfusion typical of a brain damaged by TBIs – not unexpected, as previous

scans of other types had verified multiple points of structural damage. The image meant that my brain was not using the amount of oxygen that a normal brain would have been. That difference was apparent, not only in the scans, but in the neuropsychological testing and other measures of cognitive and emotional impairment with which I had been evaluated.

By the time I had completed 20 ‘dives,’ the changes I was experiencing were becoming undeniable. Nearly every facet of my injury profile began to improve. Pain levels dropped. Sleep improved. Memory improved. Attention span lengthened. Irritability decreased. I started feeling things I had not felt in years. Good things.

Happy things. I was able to sustain a light workout program for the first time since 2008. We scanned my brain again. The amount and extent of blood perfusion had increased significantly, matching the subjective results that even my guarded skepticism was compelled to recognize. The SPECT image is one of the most reliable predictors of the long-term prognosis of brain injury and mine had just changed radically.

The Harch's covered the cost of my treatment from their own pockets, as they have for dozens of other Veterans before me at no small sacrifice. John and SFTT rallied donors, mostly West Pointers, to help cover living expenses for four months of care. Gulf Coast Alumni quickly assumed an overwatch position and contributed several thousand dollars. I could not have covered the costs alone. Even a 100 percent VA disability rating only matches the pay of a private first class; not enough to maintain dual household with four kids at home.

HBOT has not completely healed my wounds, but it has given me more back than I thought possible. More than five years after leaving Iraq, a husband and a father finally came home to his family. The treatment that Dr. Harch provided unquestionably

saved my marriage. It has enabled me to participate in and experience life in ways that I, and my DOD and VA doctors, had assumed were gone for good. I have even been able to contribute a little bit back. I am no longer a husk. Looking back on those dark days, I do not believe it would be unfair to say that Dr. Paul Harch and SFTT probably saved my life.

About the Author

Ben Richards is a combat Veteran who suffered disabling brain damage from a Traumatic Brain Injury (TBI) caused by a suicide bomber in Iraq and suffered from Post-Traumatic Stress Disorder (PTSD). He experienced significant healing from HBOT. He served in the Army for 16 years in the Armor and Cavalry Branch and is a graduate of the United States Military Academy at West Point and Georgetown University. He currently serves on the boards of the National Hyperbaric Association (NHA) and the International Hyperbaric Medical Associations (IHMA) where he advocates for improved access for invisibly wounded combat Veterans to hyperbaric oxygen therapy. He also serves as an executive director for the Veteran-serving nonprofit organization Stand for the Troops.

Army Veteran, Patrick Zeigler was shot in the head at the Fort Hood massacre on November 5, 2009. Thanks to Hyperbaric Oxygen treatment years after he was not expected to live, much less return to a sense of normalcy, Zeigler is testimony to the power of the community and the wound healing powers of oxygen under pressure. Watch the video here: <https://fcnews.tv/2rg2vC2>