

## Case Studies- Treating Lyme Disease with Hyperbaric Oxygen Therapy

A highly active and athletic 29 year old, Richard first contracted Lyme while horseback riding in the Adirondacks in 1990. Soon, the disease began to ravage his body. He could not sleep, suffered from flu like symptoms and lost 40 pounds in the course of a month. He could not walk for 200 feet without passing out and entered the hospital emergency room on a monthly basis for extreme allergic reaction that caused severe swelling in his throat, preventing him from properly breathing. After visits to 36 different physicians and specialists, his symptoms continued to escalate, so he began delving into the world of medical research in order to save his own life.

Richard thus began to educate himself on everything having to do with immune disorders, possible therapies as well as relevant medical studies around the country. He soon discovered the research of Donald Freeman, M.D., and William Fife, Ph.D., at Texas A&M University. Both were conducting studies using hyperbaric oxygen therapy as a treatment for various immune disorders. The study theorized that the pressurized treatments had an immune modulating effect on those extremely dysfunctional immune systems. This interested Richard as he noted improvements in his condition after a scuba diving trip (increased pressure similar to hyperbaric) and observed severe set backs when he flew on a plane, which simulates a decreased pressure environment.

He soon acquired a hospital grade hyperbaric oxygen chamber in 1994 and began using the chamber for 60-minute sessions a few times a week. After noticing immediate improvement, Richard began a quest to scientifically document his results and contacted James McCoy, PhD. at an immunology lab in order to verify the effects of hyperbaric on the immune system. A Lymphocyte Blastogenesis Assay was performed pre and post hyperbaric treatments to measure T and B cell functionality. The results had proved that hyperbaric oxygen therapy had a re-balancing effect on the immune system. Richard's normally elevated B cells and low T cells moved into the normal range after each session with hyperbaric therapy. The trial was duplicated 11 times with identical results.

Within the first couple of weeks, Richard's symptomology began to disappear, but his use of the hyperbaric chamber continued, even through his remission. He followed the Life Force Hyperbaric Protocol of 3 treatments per week for 2 months and then subsequent treatments of twice a week for 2 years.

Due to the high operating expenses and usability issues of his hospital grade unit, he reluctantly began to cut back on hyperbaric treatments. The unit weighed 1500 lbs and operated off of 100% liquid oxygen. Treatments were performed in his garage because of the size of the unit and there was always the danger of using 100% oxygen. Richard did more research and stumbled on a portable mild hyperbaric chamber, which operated at significantly lower costs than his hospital grade unit. The portable chamber used ambient air to operate thereby eliminating the concerns about oxygen toxicity and other dangers surrounding the use of liquid oxygen that was required with the hospital grade unit. With the portable chamber, he was also able to perform self-treatments and placed the chamber in a bedroom for greater overall treatment comfort. He continued to use the new portable chamber to maintain his remission from Lyme and as an internal and external stressor control to avoid colds and flu's and quickly recover from a foot surgery.

Richard was fortunate to be able to gain access to a hyperbaric chamber for his Lyme recovery, although most patients are not able to afford a hospital grade unit. However, due to recent advancements in technology, portable mild hyperbaric chambers are more accessible to patients. Due to the comfort of the portable chamber, the hospital grade hyperbaric unit now sits idle in the garage.

A 47-year-old female was diagnosed with Lyme within the first month of exposure. She immediately began antibiotic treatments recommended by her insurance physician but they did not relieve her symptoms and the Lyme continued to flourish. She suffered mostly from extreme pain, fatigue, tingling sensations, inability to sleep and severe neurological dysfunction. She saw immediate results with hyperbaric therapy and was able to sleep and had a marked decrease in pain. She reported feeling an increase in her strength and endurance after only two hyperbaric therapy sessions. She then began to do hyperbaric every other day for 60 minutes. Her migraines have subsided and her biggest complaints of brain fog and buzzing feeling in the brain have disappeared. She is now functioning in the workplace and considers herself recovered. She continues to do maintenance session twice a week and never goes more than a week without at least one hyperbaric session.