

## Heidi's Injury and Recovery

It was October 29, 2015, a very windy day on Lake Champlain. I had learned to kiteboard a couple of years ago, so I was proficient in the sport and the skills kiteboarding required. My husband introduced me to kiteboarding. He is a weather master, especially when it comes to wind and knowing which size kite to use. He also knows when to get off the water. Perhaps I relied on his knowledge too much that day. Regardless, he was not there the day of my injury, and he had warned me the wind was gusting 44 knots. I had already kited for an hour and had almost called it a day, but for whatever reason, I went up for one last ride as the wind picked up.

BIG mistake. As I launched the kite, I was instantly sky-rocketed upwards, about 10 feet in the air and shortly landed hard on the ground. I didn't know what had happened but felt I was okay. My friend hung onto my harness and told me to lower the kite (which is attached by four lines 100 feet above you). As I did, he was unable to hold onto me because the winds were so gusty and strong. I shot through the air sideways, like a cannon, and hit a downed tree with my head. I instantly broke my neck and went limp. I knew in my mind that I was a quadriplegic. I felt like I was floating; I couldn't tell if I was on the ground or not.

My friend rushed to me, and luckily, a nearby kiter was an EMT. He held my head for 45 minutes until rescue got there. I never lost consciousness and was able to tell him that I broke my neck and that I had lost all sensation. Unknown to me until later, apparently, I repeated this over and over again and kept asking if I was on the ground. I was having a hard time breathing because I also broke my second and third ribs. I felt like I had 500,000 volts of electricity going through my body. My blood pressure and pulse were dropping quickly and I was in desperate need of urgent medical care as I was going into neurogenic shock.

I don't remember the ambulance ride and very little of the early hours in the ER. I do remember seeing my family although I was so critical, only two family members were allowed at a time. My mother tells me I was touch-and-go for the early hours of the ER, but I don't have any recollection of this. I DO remember going in for my MRI and the nurses asking me to try to sit up! I said, "Are you serious? I can't move any part of my body so how can I possibly sit?" I was like a rag-doll propped against their bodies as I fell to one side, forward and backward.

**My diagnosis:** Incomplete spinal cord injury with central cord syndrome, C4 fracture, and fractured ribs 2 and 3 on my left side. I could only move my big toe on each foot. I started to imagine my life as a quad. What would that look like? How would I live? Where? My job? My kids? My parents? It was all so surreal. I was beyond devastated. Moving was my most essential

need in life. I couldn't even process the image. But, the prognosis was somewhat optimistic, as I had mostly bruised my spinal cord and the doctors had no idea what the recovery would be but felt that as the swelling went down, I would ideally regain some function. Based on science, people with this injury typically regain movement over the course of two and half years.

I spent the next week in ICU and I remember most of it, but I was in and out of lucidity with drugs to try to decrease the pain. My entire body continued to feel like I had high voltage surging through it. Nothing would relieve me of this, despite all the meds they gave me. My husband never left my side. I remember asking him to pull on my arms at 2:00 a.m. because it gave me temporary relief in my upper body. We had to get my pain under control so I could go to rehab, but not much seemed to help.

I was transferred to rehab at Fanny Allen in Burlington with the expectation that I would be there for at least six weeks before going home. Upon admission, I could finally move both feet up and down, and I remember how unbelievably excited I was. I knew that this was the first sign of healing, as the lower body typically comes back first in spinal cord injuries. For 24 hours a day, I wore a Miami J brace to prevent my neck from moving and they still weren't sure if I needed surgery to stabilize my fracture.

My days at Fanny Allen were spent mostly with PT and OT, twice a day for an hour each (I can't speak highly enough of the nurses - they made such a difference). I still had no use of my upper body and couldn't sit up by myself. I used Siri to get in touch with the nurses until I had enough strength in my leg to use a call bell with my foot. Every day I regained some function. It started in my right leg and then my left and then moved to my right upper body and eventually my left upper body.

As a physical therapist, the process of recovery was fascinating to observe and to experience. I had been an athlete my entire life and was very fit when I got injured. I believe my muscle memory and fitness level going into this allowed me to recover as quickly as did. I also had unbelievable family and community support and I think there is so much to be said for that.

On day 12 after my injury, my PT asked, "Are you ready to walk today?" I still couldn't really feel my feet, so this seemed impossible. But miraculously, I walked! I walked like I had a stroke, with no left upper body movement, my left leg was stabilized ... but I walked, and it was the best feeling. Each morning I would wake up and take stock of my body to see what new things I could do. I was always amazed at each new movement and I tried not to get too discouraged if I couldn't move in the way that I hoped. I would say to myself, "Please let me just be able to walk

again,” and then before I knew it, I would say, “please let me use my left hand again,” and so forth, “please let me be independent again, please let me work again, please let me run again!” I wanted more of my body every day, but also knew I had to be grateful for my steady albeit slow recovery.

Fast forward to week three in rehab. I was cleared to ambulate in my room on my own and go outside with supervision which felt liberating. In fact, I was discharged after three weeks and was titled the fastest recovery they had ever seen at Fanny Allen with my type of injury. The decision was made to send me home. I had the advantage of knowing how to rehab and what my body needed. It needed time to heal and where best to do that but in the comfort of my home? I was home for Thanksgiving that year with all of my loved ones and I remember it as the best thanksgiving ever.

I underwent both land-based and aquatic physical therapy for hours a week and the pool was a great added benefit to my recovery. I still felt extremely vulnerable as I was relying on my family for transportation and was still in my Miami J brace, however, X-rays showed my fracture was healing nicely and surgery wasn't indicated - phew! As the days progressed I was able to regain use of my body in different ways. The left upper extremity took the longest to come back. It took me six months before I could raise my left arm above my head. I was determined to speed up the recovery and decided to use my left extremity for everything, to put dishes away, comb my hair, vacuum, etc., even though I am right-hand dominant. My progress was steady in terms of mobility, but I had no strength or endurance. I just kept pushing my body every day until I was exhausted. It was all I knew; push through with exercise. It cleared my head and made me feel somewhat “normal.”

Even though I was walking, dressing and driving, I still had a lot of pain throughout my body that medications didn't seem to help. I constantly had the sensation that my body was on fire. My face would flush, my arms and fingers burn. Medications just wouldn't help, so I decided to stop taking those altogether. I finally returned to work, part-time, five months later. I saw a few patients a day, three days a week, having to rest often during treatment. Sometimes, I would lie down during patient treatments and felt so grateful for their willingness to tolerate my fatigue and pain. But I loved my job and was so grateful to be back. It was a full 10 months before I was able to take on a full caseload, however, I was still completely exhausted and withstood terrible pain at the end of each day. I just kept pushing through with work and exercise. Eventually, I got back on my skis, my bike, started running, and, yes, revisited the kite! Mind you, everything was slower, harder, and more difficult as my balance, endurance, gait, and stamina were all altered. But, miraculously, I was doing everything I used to do prior to the accident. Each year, I noticed I

was getting stronger and demonstrated increased endurance and balance. I worked at this very hard. I worked out every day, lifted weights, practiced yoga, acupuncture, stretched, and challenged my balance.

Today, five (plus) years after I am back working three days a week, seeing 8-12 patients a day. I still experience burning throughout my body which gets worse when I am tired and stressed. Sometimes it feels like a tourniquet is strapped around my quads, torso, feet, ankles, and arms when I am really tired, and occasionally I get involuntary muscle spasms in my left leg. I still can't feel hot on my right side, and I drag my left leg and have difficulty raising my left arm when I'm very tired. But overall, I look normal, and most people who don't know me would have no idea what I have been through.

I consider myself incredibly lucky and fortunate to have such a remarkable recovery. I attribute my success to my fitness level prior to my injury, the care I received and an incredible support system. I have an amazing family, a wonderful husband, and supportive friends that encouraged me throughout this ordeal. The countless emails, cards, phone calls pushed me to keep going, even though I wanted to give up several times. I don't want anyone to think that I breezed through this. I certainly wanted to give up and, yes, I hate to admit this, but there were times (and still are) when I wished I was still a quad but was relieved of my pain.

I am a much better PT for withstanding this injury; I have more empathy for my patients and the obstacles they have to overcome and I am grateful now more than ever to be part of my patient's recovery story.