DIARY OF AN INJURY

The injury occurred on 8 September 1984 while playing for the USUHS Rugby Football Club against Montgomery County Rugby Football Club at a place called Burning Tree Elementary School. I, being about 27 years old and within eight months of graduation, was playing rugby on the sunny, Saturday afternoon. Approximately 15 minutes into the game, I collided with another player on the opposite team while scrumming together. Immediately upon impact I realized that my neck was not normal. I had a buzzing sound in my back and a floating feeling in my head. I felt as if my head floated backwards onto the ground. This was a very enjoyable experience. Upon reaching the ground, I realized that I had no feeling in any of my body parts or movement from the neck down—a very frightening and helpless feeling. At that time I told Pat Gorman not to move me—"I think I've broken my neck"—and they did a good job of providing quick immobilization and I did not experience any other pains or change in position. Emergency medical technicians were called and I was carried to the Bethesda Naval Hospital where x-rays were taken, which showed an anterior subluxation of C-6 over C-7, with bilateral locked facet joints. There were no bony fragments and I was put in traction via tongs in my temporal bones.

While under traction, CT scans and myelograms were performed. It was determined that I would need further traction to reduce this subluxation. So I was progressively placed in greater traction—five pounds for five minutes, and finally to 65 pounds maximum. My subluxation resolved at this point. Further CAT scans and x-rays showed that I had normal alignment, no bony impingement on the canal, and no impairment of the CSF canal space. I was then taken upstairs to the neurosurgery stepdown unit and placed under their care.

My stay in the neurosurgery step down unit lasted about four days. While there, I began to have some pain from the tongs in my forehead, due to the 15 pounds of traction that I was exposed to, and I experienced a lot of pain and numbness in my arms and shoulders. I was given a range of medicines for the pain, from Percocet to Percodan to Demerol. I worried about the meds that were being given to me and I also worried about the capabilities of the nurses that would change me; a normal change would require five people. I was exposed to a code one night where people were running around trying to find the patient who set off the buzzer but didn't seem able to find the patient's location, and I worried whether I was the one being coded; there was one patient across the way that had difficulty breathing, due to a lesion similar to mine who could have been the code patient, too. I would have been unable to help if he had been the one to have coded. I pinched myself to determine if I was awake or just dreaming this story.

While in the neurosurgical stepdown unit, I was exposed to position changes and vital signs every hour, which interfered with sleep. Even at night it was very difficult to sleep because the night staff had the tendency to make lots of noise. On my last day in the unit, I experienced the psychosis that is often described as due to decreased sleep. I had an altered state of consciousness and I felt quite confused and disoriented, unable to concentrate and very depressed. I had had feelings of desperation and even suicide on day two, after I realized what happened to me, and I had them once again on my last day in the unit, when I realized that I was confused and disoriented and without rest. I couldn't understand why I should continue my existence as a person in the state of helplessness, such as I was.

I found that the most difficult time to deal with was between about 2:00 and 6:00 in the morning. It was very lonely and quiet, and was a very depressing period of time. This period of time was much improved by my visits with Dr. Auster, a physician in the Student Health Clinic at USUHS. I told him that I had problems early in the morning and that was my most fearful time and the time when I was most lonely. So, he would come in from 5:00 to 6:30 AM each day, which I found to be very beneficial; just a time when I could share my thoughts and ideas and alleviate some of my fears of the hospital experience. He started a practice of giving me a hug on the way out each day. I thought that was unusual and at first, it frightened me. Now, I see the situation as being fearful of becoming too close to him or emotionally attached and I look forward to his gestures and hugs as a matter of being friendly and concerned. Prior to his visits I was scared, depressed and lonely.

I was moved back to the ward on 12 September, and my care became more routine. I was moved into a private room, which was quieter and had less distractions. However, it was more lonely because I had less constant nurse care. Calling the nursing staff was a problem. I was not strong enough to push the little nurses' beeper and I was very fearful that I wouldn't be able to call for help if something should happen. Not being able to move from the nipple line down, I was extremely dependent on others for support.

On 13 September, my Foley catheter was removed and I was on intermittent catheterizations, at which time I developed a fever of 102 degrees, with sweats and chills, and a fever work-up was undertaken. Two days later, gram positive rods were growing out of my urine and I was started on Septra, double strength, for my first urinary tract infection, approximately one week after the

accident.

After I was back on ward, my wife Margaret and I were casually told by the senior neurosurgeon that I had a five percent chance of ever walking again. This happened on rounds in front of all the residents and staff people, and the neurosurgeon went on to say that because I only had a five percent chance of walking I should consider further therapy, i.e. surgery. Three options were given to me: (1) Further traction for three months; (2) A halo-vest brace that would prevent neck movement by externally fixing my head in position relative to my thorax; and (3) Spinal fusion. He said that he recommended fusion and that was the way he thought I should go.

I searched out further opinions from neurosurgeons at a medical center and at a spinal cord rehabilitation center. On Friday, the 14th of September at approximately 6:00 PM, I told the neurosurgeon at Bethesda that I would much rather have the halo-vest brace because it was the most conservative treatment and allowed me the best options for further surgical care if need be. The neurosurgeon, in the presence of Margaret, rapidly informed me that not in his hospital was I going to get a halo-brace and stormed out of the room. The next day he returned and more or less apologized for his actions and said that if that's what I really wanted, even though in his best opinion he wouldn't recommend it, I could have the brace if I liked.

During this time period I continued to have my position turns with the Gardener-Wells tongs until Tuesday, 18 September, three days before I left Bethesda, when they came by and put on my halo-brace and vest affair. My good friend Pat Gorman and one of the residents came in with a large steel cart that looked like something out of a tool room and gave me a shot of morphine and also used subcutaneous lidocaine down to the periosteum in 4 positions. Margaret held my head while this procedure was performed and my Gardener-Wells tongs were taken out, which wasn't very painful, actually. During all my position changes Margaret was the only one I would let hold my head. I trusted her. A strap brace was put on my head. Next, I had the metal, "halo" ring sized to my head, and four stainless steel pins attached to the ring were placed into my skull; one each above my eyes and one each in back. They actually put one pin in wrong and they had to take it out and put it in again, and that kind of upset me. Next, four struts were attached to the "halo" ring and anchored in a fiberglass vest which was lined with sheepskin. As soon as this vest was put into place I realized that I felt very stable and very secure. I thought, "Okay, now I'll go to surgery if I need it. I'm stable and I don't have to worry about being rolled and my neck being moved in any surgical suite or even after the operation."

Once the halo was put on, however, I had problems receiving pain medicine. I had a lot of pain associated with it during the first four or five days and some of the pain meds I felt I needed were withheld, even though I knew I wasn't using them to excess. I had localized, definable pain from a known cause—the pins holding the halo in place—likely to be of a limited duration.

My next choice was where to go for treatment. The neurosurgeon at Bethesda recommended the West Roxbury (MA) VA as probably one of the best spinal cord rehabilitation centers around. As it happened, while on the neurosurgical stepdown unit I was exposed to my first fellow paraplegic, a man named Ron who worked at the West Roxbury Rehabilitation Center. I again searched out further opinions, including talking to the chief of Rehabilitation Medicine at Walter Reed Army Medical Center. She happened to have worked at West Roxbury for seven years and called the people there and asked if they were still as good as they used to be, and they said they were, so she also recommended that I go there for rehabilitation. I optioned to go to West Roxbury. This decision caused big problems with the Airevac system because the patient is supposed to go to the nearest hospital which can provide care and there were other VA hospitals with rehabilitation programs closer to Bethesda.

Finally, on Thursday, 20 September, I found out that on the next day, I would be going to West Roxbury and so we made preparations. My mother had been visiting me for the past week or so, and decided to go back to California. Margaret would accompany me during the ambulance trips and on the plane to West Roxbury.

By that time, motor strength and coordination in my upper extremities had developed to where I could pick up pens and pills in my left hand and oppose my first and second digits of both my left and right hands, and my antigravity muscles (particularly the triceps on the left), were becoming stronger; however, I didn't have any movement in my lower extremities. But I did have light touch, full vibration, proprioception, two-point and dull/sharp pin prick, and hot-cold discrimination below the nipple line. Additionally, I had a neurogenic bowel and bladder, which requires daily enemas or suppositories, along with my bladder catheterizations every 4 hours. Also, 3 days after the accident I began having spasms in my lower extremities. They started out as bilateral, with flexion, abduction and then extension, and after 4 days became unilateral. Sometimes the spasms were stimulated by the thought of moving an extremity.

On Friday, the 21st of September, I left Bethesda for West Roxbury. The morning of my departure from Bethesda started out early, at 0430 hours, with a Foley

catheter being placed in my bladder for the trip, while Margaret was packing in my room. Dr. Auster was visiting at the time. I had my friend, Pat Gorman, pick up my x-rays, except for my CAT scan, which I put on the head of my bed, so they would be carried with me to the airport. Also, I had to have pin-tightening and vest-tightening of my halo to make sure that all my struts and the nuts anchoring them in my vest were secure so that I wouldn't be coming loose during my transportation to West Roxbury.

The transfer was kind of a scary situation for me because I was being flown from one hospital to another without really knowing what to expect, but looking forward to the new hospital and in a way feeling sad about leaving the old hospital. I felt safe and secure in Bethesda because I had had all my initial treatments at Bethesda. As I was carried out of the hospital they had problems with the portable bed; it wouldn't collapse and I was afraid I would fall and dislocate myself (Whoa!!). The bed collapsed okay and they put me in the ambulance and took me down to Andrews AFB where they put me in the Airevac staging area at Malcolm Grow AFMC, a real nice facility they have there for people who are in the Airevac system. I waited there for approximately an hour and a half for my subsequent flight on C-9 to Massachusetts.

While I was waiting for my flight, Dr. Auster, who had a patient at Malcom Grow who was in labor, visited me. Also my friend Howard Suls came and visited me; I had played rugby with Howard for the last three and a half years and we had become very good friends. They were both very sorry to see me go and we had a very emotional interaction. I thought I knew how to control my emotions and felt that I had to be strong and powerful during emotional times, so I tried to remain stoic, but inside me I had a bursting emotional feeling and at times we started crying. In retrospect, Howard was very sorry to see me go and felt that I was leaving him early because he thought that we would be together at least until graduation. The moment was very touching and emotionally sharing.

From the staging area, where I had been in a regular hospital bed in a small private room, I was transported out to the Air Force blue bus on a green military litter. This was a very strange situation. Green military litters brought back a feeling of Vietnam and all the war injuries that occurred there. I was put on the back of the military bus and stacked like a tuna. From there, being carried up the ramp to the C-9 was scary because it was a new situation for me and new people were handling me. No one was familiar with my case and I didn't know if they had experience with spinal cord injury cases. I felt like a piece of meat being carried onto a meat wagon. The saving grace was that Margaret was there and she watched after me closely and had some idea what to do and why. I was loaded onto the plane uneventfully, and attached up front, right near the nurse's station, because I was an acute case. During the flight they took good care of me. They were concerned about my well-being, turning me and giving me water. I was taken care of by a Canadian Nurse who was on an exchange tour from Canada.

My trip was uneventful, even though we made several stops before we landed at Pease AFB in New Hampshire. Before we landed, my bladder began feeling very full. My Foley had fallen out and Margaret had to recath me in flight, about five minutes before we landed. My bladder contained 1000cc of urine at that time, so I was glad to have her along and glad to have some feeling down in my bladder. The landings were great. The pilot painted them on the runway. I was scared because landings can be rough and bumpy. The flight in general was very smooth and not uncomfortable in any way.

Once landed at Pease, we had about a ten or fifteen minute wait before EMT's came to pick us up. We had about an hour and a half drive down to the West Roxbury hospital. On the drive down, Margaret and I shared experiences with the EMT people and they told us stories about their experiences with spinal cord injury patients. They were very concerned individuals.

We arrived at West Roxbury and I was taken in the back door and the first thing I remember was seeing that the ceiling was all torn up. I thought, "This is supposed to be the best spinal cord center in the United States and it is torn up and under construction?" and I was a little bit scared. I questioned my decision concerning where I should go and which place was the best just as I'm being brought into the place. Admission asked me a few questions, and I was taken right to ward P2. Later, I found that this was the acute side of the ward where all of the patients were on respirators. Patients were really very sick in general. I was placed in a bed and almost immediately Dr. Sakaroti came in. He was surprised that I was in a halo; he thought I would be transported under traction. So much for communication between transferring and receiving hospitals. But he did a complete neurologic exam and decided that I did have some perianal sacral sparing. Over the next couple of days he told me that he has seen a lot of muscle return at four weeks after the injury in patients with similar sacral sparing. That was good news to hear. I was happy that he could give me some predictions as to how I would do based on my exam, which was more than anybody else had told me along the way.

2Lt. Craig Bash, USAF, MSC
MS-IV
September 1984