Doctor in pain — learning as a patient

Bruce W S Robinson

I was reluctant to write this description of my experiences as a patient after a traumatic backyard accident, but my colleagues encouraged me to do so because the insights gained from the experiences may be of interest to others in the profession.

The accident

In the late afternoon of a warm Sunday three years ago I was using a friend's circular saw to cut pine splits to make a small garden retaining wall. To generate a piece with a special angle, I foolishly placed it unfixed on the ground and I attempted to cut through it. The saw kicked backwards out of the timber and in that split second I knew I had made a major error.

The saw, still in my hands, entered the medial aspect of my left lower leg, tearing its way through gastrocnemius, soleus and tibialis posterior, then the posterior tibial artery, vein and nerve before biting into the tibia then deflecting onto the right leg, entering just inferior to the medial malleolus and making a deep vertical cut into the foot between the first and second long extensor tendons, cutting almost through to the sole. It all happened in a fraction of a second.

The pain was searing. I threw the saw away about four metres, looked down and tried uselessly to grab the two large gaping wounds, but blood from the wounds was pumping out between my fingers. I called my wife's name (in a voice that my wife later told me instantly informed her that something awful had occurred) and immediately switched to "medical mode". I quickly began to calculate how much blood I was likely to lose, the risk of shock and acute tubular necrosis, and estimated the interval of time that was required to get me to hospital to avoid these complications. I looked over at the circular saw, which was describing a circle on the pavement, the momentum of the blade keeping it turning (the safety guard was defective). In the process it cut its own electric cord.

Still clutching the gaping wounds I crawled to the front of the house telling my wife that I would clamber into the rear of the station wagon for her to transport me to the Emergency Department of my hospital, less than five minutes away. She wisely decided that an ambulance was a better idea.

I lay on the paving stones in front of the house intermittently screaming in pain and swearing at myself for my stupidity, at the same time trying to reassure my two sons, aged six and three at the time, that I was basically OK. I checked the movements of my toes hoping that I had not paralysed my foot (it was difficult to recall exact neuromuscular anatomy under the circumstances). The pethidine in my doctor's bag had expired. It was tried anyway but was useless. The ambulance took 20 minutes to arrive. It would have been quicker if she had wheeled me to the hospital in the wheelbarrow, although the bleeding had almost ceased, presumably due to arterial spasm.

As I was placed on board the ambulance my son consoled my wife by saying "don't worry Mummy, Daddy will get a new leg in heaven".

In casualty

I had mixed feelings about entering the Emergency Department of a hospital in which I was a consultant. While I felt safe, I would have preferred anonymity. The dressings that the

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ambulance officers had applied had stemmed the flow of blood and apart from deep pain, I felt reasonable.

An older nurse and the acting registrar were not, it appeared to me, certain what to do and opted for removing the dressings to inspect the wound. This caused the artery to gush again and I lost several units of blood onto the floor of the Emergency Department. I could see the spurt of blood leaving my left leg, forming an arch over my right leg and the trolley and providing a slippery surface on the Emergency Department floor.

I had been given an injection of pethidine which worked for approximately 10 minutes. I have a very high pain threshold, having had innumerable football injuries over the years, and am described as a stoic. I was certainly not ready for what happened next. The acting registrar attempted to clip the spurting artery with artery forceps. She missed in the sea of blood and succeeded only in crushing the proximal end of the severed posterior tibial nerve. The pain was excruciating, like multiple high voltage electric shock waves. I screamed in agony. I was given another injection of pethidine which also failed to work. Two more attempts to grasp the artery produced the same excruciating result. I was in tears. I vaguely knew that firm pressure was the appropriate treatment but was surprisingly unassertive in the circumstances.

Ironically, at that exact time, my own registrar was at home talking on the telephone to another Emergency doctor about an asthmatic and heard the screaming noises in the background. It was a great relief to see the face of the anaesthetist at that point and to be told that I was going to theatre. A general anaesthetic at that stage sounded perfect.

An inpatient

I awoke after the operation to find my left leg dressed and in a plaster backslab and my right foot sutured, with a skin graft preparatory dressing below the medial malleolus and a donor site on the medial right thigh. I slept well.

I am amazed at how well the body learns to overcome the urination reflex when horizontal. I had enormous difficulty urinating, although this was partly because whenever I closed my eyes and tried to imagine waterfalls and rain, and concentrated on urinating, the analgesics that were being infused caused me to fall asleep. Fortunately the intravenous line blocked, the analgesics wore off and I was finally able to urinate without requiring the dreaded catheter.

I had many colleagues visit that day and I was surprised at how easily I was able to relate to them the story of the accident and the nature of my injuries. Early in the afternoon the residual effects of the analgesics wore off. I began to really consider the implications of the permanent loss of sensation to my left foot and loss of intrinsic muscle function. While initially it did not seem to be a major loss, the thought that I might not be able to run barefoot on the beach again, which I do every summer, saddened me.

I have always been an active sportsman and the sense that I now had a physiological impairment, regardless of its severity, began to dawn on me. Within minutes I was overwhelmed by a powerful sense of loss. At the same time I had a vivid flashback to the moment of the accident and re-lived the sensation of the blade ripping through my flesh and the associated searing agony. I was overwhelmed and found myself helplessly sobbing. At that point our church vicar arrived and I asked him to request that the nursing staff place a "No Visitors" sign on the door for the remainder of the afternoon.

I tried to be a reasonable patient, knowing that doctors are always thought of as being unreasonable and demanding patients. I had to decide how to handle the junior doctor who had, despite the best intentions, caused me so much agony in the Emergency Department. With great reluctance I decided the best thing to do was to try to help her by apologising for being such a difficult patient. In retrospect that was probably an error.

I found it very difficult to obtain information from my registrar and surgeon although they were both friendly and helpful — I think that my immovable, horizontal status in bed, plus the episodes of severe pain, rendered me vulnerable and powerless and I lost my usual assertiveness. I didn't ask the questions about the operation and the injury that I really wanted to ask. I did learn however that the crushing of the nerve in Emergency had regrettably made the microsurgical suturing of the nerve ends difficult.

The nursing staff were not only efficient but demonstrated compassion and empathy. The physiotherapists were also outstanding. Because I was sleeping each night with my neck flexed I developed tension of the posterior atlanto-occipital membranes, producing a splitting headache which was only relieved by using a makeshift "peanut pillow" to allow me to extend my neck while sleeping. I would never have realised that without their help. The physiotherapists had to catch my 190 cm, 100 kg frame several times when I fell while beginning to walk with crutches. I had never realised the level of expertise that was required from physiotherapists until this incident.

Ultimately, of course, my injuries, although moderately severe, proved not as extensive as they initially had seemed. Unfortunately, well meaning staff and visitors regaled me with stories of other individuals who had had circular saw or chain saw accidents but had cut their femoral arteries or carotid arteries or other major sites instead of just their calves. Although these stories were designed to comfort me, the sensation of the saw tearing through my legs was still too recent and vivid and their stories made me feel the sensation of the blade tearing through *my* neck and groin, as I later reflected on the incidents they described. I would have preferred these people to express their sympathy and ask me how I was feeling about it all rather than their trying to help me rationalise the accident.

Although I had a private room with a beautiful view over the tree-lined suburbs of Nedlands, after several days I experienced "cabin fever" and I asked if I could have my bed pushed out into the adjacent fifth floor outdoor gardens for a few hours. The orderlies were very reluctant to do so because they felt it unnecessary and they couldn't see how it would tangibly benefit me, in contrast, say, to a visit to the operating theatre. Yet the result was very therapeutic for me at the time.

I had over 20 visitors per day for most of my three week stay. That was of course too many and I regularly had to have a sign put on the door to exclude all visitors apart from my wife and children. My wife brought in a cassette player and some comedy tapes of Monty Python, the Goons and Victor Borge. Several times at night when I was feeling very low I put on the headphones and played some of these tapes and found myself laughing solidly for about an hour. I am sure the nursing staff thought I had gone crazy. My parents provided me with a sketchpad and on the second day I sketched an abstract picture expressing the pain of the original incident (I vaguely thought that might be helpful to me) and I also did a page of doodling. I showed these pictures to my son who announced to his grandmother the next day that his father "had first drawn a funny picture, then a picture of his doodle".

The experiences of pain made me very vulnerable and afraid of further pain. I was excessively anxious at the time the skin graft was to be applied to my right foot and enquired whether or not I needed analgesics. Although I feel a little embarrassed about that now, it does make me realise just how vulnerable I felt.

Two nights before discharge I began to experience some odd warm sensations in the left foot. These became severe over several hours and felt like burning hot pokers being pushed into the bottom of my foot. These pains continued during my last 48 hours in hospital and, having been free of pain for over two weeks by that stage, I was disappointed to have it return. On discharge, I was taking Panadeine forte.

After discharge

I left in a wheelchair, was driven home and walked up the path to the house on crutches. For some extraordinary reason I expected, and even hoped, to see residual blood stains which of course by then, three weeks later, had been cleaned up.

After three weeks in one room, the greenness of the trees in the park across the road was intense and vivid to my senses. By this stage I was continually experiencing the burning hot poker-like pains in my left foot and was upset at the irony that I had left the house in agony, been free of pain for two weeks in hospital and

now had returned home in agony.

That evening a close friend came to visit me and asked how I was doing. I began to tell him how much I enjoyed being home but that it was disappointing to return home in such pain when I again found myself sobbing. Rather than trivialise it (e.g., "you'll be OK") or explain it ("that's just occurring because . . ."), he was a wise friend and talked it through with me.

With crutches to get around, my bed temporarily relocated downstairs, a plastic shower seat to sit on with a plastic bag to cover my plaster cast for showering I was able to cope at home. The pain continued all day long. Interestingly, it was exacerbated during urination. It was severe and insistent even with analgesics and I couldn't get comfortable. A colleague and friend from the Pain Clinic was extremely helpful and compassionate and on several occasions picked me up from home to take me to his rooms for trials of local injections which unfortunately produced only temporary relief. During the first two weeks at home I was taking about 32 Panadeine forte per day plus centrally acting pain-relieving agents (carbamazepine and tricyclic agents), narcotic suppositories at night, transcutaneous nerve stimulation and repeated local injections. In addition, my next door neighbour who is a general practitioner/acupuncturist, spent many hours trying to help relieve the pain with a variety of acupuncture techniques. She was very compassionate.

Each morning I would lie on my bed and try to work. We were applying for several National Health and Medical Research Council grants that year and my scientific colleagues would come to see me to discuss the grants and give me draft copies of the applications to read through. I found that I couldn't help but fall asleep at the end of each line. When I woke up I would find that I had forgotten most of what I had read and had to start again, but would again fall asleep when I reached the end of each line. It was a futile exercise and needless to say we were not successful that year with our NHMRC grants, and I squirmed when I read through those particular grant applications later.

By this stage I felt I was undergoing the trials of Job. The pain was barely controlled with high dose analgesia and I was getting a little depressed. I developed carbamazepine toxicity, with severe waves of nausea, which was recognised by my pharmacist wife and confirmed by a neurologist colleague and a serum sample. In addition, the day after I returned home from hospital, my mother's general practitioner rang to tell me that an ultrasound he had performed on her for suspected cholecystitis had revealed massive metastatic deposits in her liver. "What do you want me to do about it?" he asked. I felt like I was experiencing the multiple hammer blows of Mahler's sixth symphony. I spent a lot of time over the next few days organising liver review, explaining breast cancer and chemotherapy and arranging hospice care. I foolishly continued to work and even saw some private patients one morning, although I was quite unwell and the patients politely suggested that I didn't look well enough to be working.

The pain that I was experiencing was ultimately considered to be autonomic neuralgia. The treatment was not working well and I was in continual pain. A transcutaneous lumbar sympathectomy was arranged but six weeks after the accident, the pain in the foot surprisingly disappeared over 48 hours.

Progress

My mobility improved rapidly and it wasn't long before I was playing soccer with the boys again on the front lawn. The anaesthesia of the left sole was replaced after several months by painful hyperaesthesia to pressure, but this has represented no major disability provided I wear shoes. To tread on anything barefoot, even innocuous smooth objects, produces intense pain. During the six weeks of the illness despite eating normally I lost 12 kg in weight and was overwhelmingly tired. It took me approximately a year to overcome the tiredness and intermittent fatigue that began during the illness. I'm now back to jogging, swimming and kicking footballs.

I understand now why traumatic accidents can produce psychological problems if not dealt with adequately. I am now much more sympathetic to the many military personnel with these types of injuries who suffer for prolonged periods after their injury. I have read with interest how, when a traumatic accident occurs in a school, a team of counsellors is called in to talk to the children. Similarly, survivors of major bus or train crashes are immediately counselled.

I noticed that after discharge I could easily talk and even joke about these traumas at a superficial level. However, when talking to my closest friends and to my brother, I found that when I tried to relate the full story I became emotionally upset. Even now, three years later, it has been a little uncomfortable writing this story down, and in the process of recalling the details of the events I became stressed and irritable. I'm still a little uncomfortable around circular saws and chain saws, preferring to avoid having to hear the noise if possible, although I have been desensitised a little to these noises by recent construction in our street. Occasionally I get a stab of pain in my left foot and it takes me back to those weeks and I feel instantly fearful that the neuralgia will recur. Mercifully it always passes within seconds.

In addition to the insights gained from this episode, there are a number of specific ways in which this experience has helped alter my own medical practice.

Firstly, I realise that even the most assertive patients become vulnerable and lose their assertiveness when ill and lying in a bed. This has altered the way that I communicate with my own patients. For example, I ask them on every visit if there is anything they would like to ask me. I also realised that there are better ways that I as a physician could communicate with my patients and I have studied to improve my own patient communication skills. This has led me to organise training programs for medical students and interns in these areas.

Secondly, my experience of severe pain, the worst of which was not the experience of the saw tearing through my legs, nor the agony of the nerve being accidently crushed with artery forceps, but the ongoing autonomic neuralgia, has changed my clinical approach to pain management. I appreciate now how debilitating the experience of severe pain can be, both during the pain and afterwards, and if there is any possibility that a patient of mine will experience severe pain at some stage during the first few days of his or her admission, I arrange for the junior staff to prescribe, in advance, various levels of analgesia so that, should the patient experience severe pain in the middle of the night, he or she need not wait several hours for the busy on-call intern to come and prescribe appropriate analgesia. Interns are often overcautious about turning their patients into drug addicts and hence often underprescribe analgesia.

Thirdly, I found the experience of listening to comedy tapes so helpful that I suggested to the hospital administration that they might add a comedy channel to the available listening through the hospital audio headsets and this has now been done.

Fourthly, I had the same experience that many colleagues have had when ill, of re-evaluating life's priorities, particularly the importance of time with family.

Finally, in an undefinable sort of way I feel that this experience has "softened me up" and friends have mentioned this also. I have always coped with exams, intern life, and emergencies without stress and, in fact thrived on them, and I always expected students and colleagues to do likewise. This experience has taught me that anyone, no matter how generally competent and emotionally strong they are, can become vulnerable, distressed and have difficulty coping, given certain circumstances. Now I appreciate the difficulties that patients, medical students, junior staff, colleagues and friends can experience, at times, and am more sympathetic.