

# The French Connection

On the 13th of March 2014 I woke up to unfamiliar surroundings. Working in hospitals for the last few years had taught me enough to recognise that I was in one, and my clothes (or lack of them) let me know that I was a patient. I could not recognise this hospital and so I racked my brain to think about how I got here. Through the fog of confusion, I could vaguely remember being on a ski trip but could not remember much else. I tried to look for more clues, but didn't get far as I found myself tied to the hospital bed. Thinking that this must all be a bad dream, I was happy and relieved to find my father (a GP) at my bedside. He filled me in on the events of the last week.

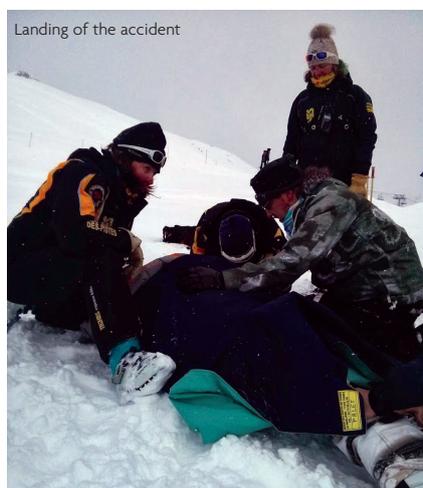
We had been snowboarding in Tignes, France. The weather was fantastic, snow was crisp and the après ski epic. Not much more you can ask for on an annual ski holiday. By day three the weather had changed, as had my luck. Now overcast with visibility poor, we had spent the morning traversing the valley, deciding that this wasn't much fun we broke for lunch. With no improvement by the afternoon, we decided to stay put and spend it in a snow park.

A few runs in, I foolishly decided that I wasn't getting enough air on a particular jump. So I hit it again with double the speed and double the run up. Big mistake! I lost control at the peak of my airtime, overshot the landing and used my face as a brake on the ice. Lying lifeless thirty yards from the ramp my friends ran to my aid. Finding me unconscious they called for help and 30 minutes later the ski paramedics reached me. It was documented that my initial GCS was 3 and I was Cheyne-Stokes breathing. Concerned by the size of haematoma forming on my right temple the ski paramedics were convinced I must have smashed my skull. Once stabilised we awaited the helicopter. With the same conditions as the morning it was two hours before a weather window opened and the helicopter could land. I was taken from the slopes to the local medical centre where I was intubated, before a second air ambulance took me to the ICU in Grenoble Hospital a few hundred miles away. This was to be my new home for the next few weeks.

On arrival I was taken straight to the CT scanner. I had multiple petichial cerebral haemorrhages, a counter coup subarachnoid haemorrhage, gross cerebral oedema, bilateral first rib fractures, significant pulmonary contusion injuries and extensive soft tissue swelling outside my cranium. Fortunately I had not fractured my skull. My father arrived at Grenoble a few hours later with a 300 euro taxi bill. At this time, I was stable in my coma and the plan for the first day was to watch and wait. By day two I wasn't showing the improvement



Jump before the accident



Landing of the accident



My lift

the doctors had hoped for, they considered drilling micro burr holes to decompress my skull and relieve some of the intracranial pressure. Subconsciously I must have heard them at this point, because I started to stir. Shortly after I was extubated.

Now awake it was noted that I had a right hemiparesis and homonymous hemianopia on the same side. Considering the scale of my injuries the doctors and my father thought I would be left like this for the rest of my life. With such a grim outlook there was little more that could be done other than keeping me comfortable and seeing how I recovered. My father was by my bedside for as much of the

time he was allowed, he kept everybody back home updated (including my work) and read to me. He sat on my left. I owe him a lot.

Traumatic head injuries are classified based on the clinical history and the examination findings. Severity is separated between mild, moderate and severe head injuries based on initial GCS, duration of coma, duration of anterograde amnesia and the need for neuro surgical intervention. This helps to predict an initial outcome/prognosis for the individual. With an initial GCS of 3, a coma lasting over twenty four hours and having a prolonged period of anterograde amnesia, I was well into the severe category. The understanding and management of acute brain injuries is under much debate currently in medical literature, with new concepts such as Brain Impact Apnoea in which the respiratory centre in the brain stem shuts down after a significant head injury producing a period of apnoea. Although only proven in animal models this demonstrates the importance of good basic life support. Acute management is also up for debate – the DECRA study talks about the potential benefits of aggressive decompressive craniotomy in acute head injury victims. The study did not show favourable results. Although there is no clear plan on acute management currently I feel in the next decade there will be drastic changes in the world of acute management of head injuries.

Fortunately, slowly I started to improve. Although conscious for this initial period, I was not myself and have no recollection of events and my actions. The cerebral irritation had made my behaviour unruly and unpredictable. I pulled out every IV cannula, I was verbally abusive, and accused everyone of trying to kill me (including my dad). Eventually I was tied down as I was a danger to myself as much as everyone else. The use of restraints is unclear in the UK. Many doctors simply state that it is illegal. The real answer is that it is legal but very questionable. Ethically restraining a patient against their will is a breach of their autonomy

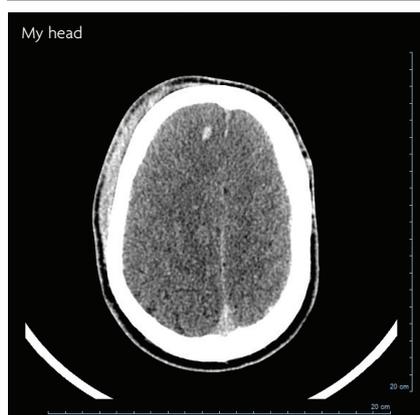
(one of the 4 basic pillars of the Beauchamp and Childress model of biomedical ethics). Currently in the UK the GMC states everyone has autonomy even if they don't have mental capacity and so restraining anyone against their will is a breach of autonomy. I am not going to attempt to answer or comment on the logic of this issue. To address this issue would take a separate article if not a book to scrape the surface of questions asked. With everything being said, I am happy that they tied me down.

A week or so passed before I started to feel more like my normal self. I had forgotten most of my hardships (intubation, central line, parenteral nutrition, urinary catheter). On Day 9 I was sat out of bed, day 10 I was walking around the ward. The hemiparesis and homonymous hemianopia had fortunately faded at this point and I was just left (and still am) with a few upper motor signs in my right leg (Occasional clonus and mild hyper reflexia).

My memories come in at around day 11 and as a result I had lost all sense of time. I had been due back at work the week before, fortunately dad had kept them informed. I was keen to get back home and get on with my life. A few days later, I was discharged and my insurance company got me on to a busy easyjet flight back to the UK. Still feeling quite jaded and fragile on arriving home, I intended to take a week off to recover before returning to work. It wasn't till I saw a very reputable Neurologist (Dr R Kent) specialising in neuro-rehabilitation that I realised my return to work wouldn't be so simple. She explained my increased risk of having a post traumatic epileptic event, and insisted I needed to take a minimum of three months off, avoid driving, sleep deprivation, alcohol, and anything else that could lower my seizure threshold. The DVLA has specific rules on driving after a severe head injury. The patients have the responsibility to inform the DVLA and normally take 6-12 months off driving based on a doctor's review. These rules are a precaution only for the increased epilepsy risk.

I was seven months into my FY2 year when this accident occurred. I met with my hospital to explain what had happened and the discussion I had with my Neurologist. Everyone was very supportive and understanding. I was referred on to Occupational Health and a professional support group who both provided much assistance. There are many facilities available for people who have suffered a brain injury. Although I didn't require any of them I was informed and always knew there was someone I could turn to if required. In cases of head injuries needing support my advice is to ask your local Neurologist to tell you about the services available in your area.

Getting used to my new pace of life was difficult. Initially, I just felt odd. I suppose unless you have had a head injury it's difficult to fully understand the feeling, but I will try to explain. I was slower at everything both physically and mentally. It took me two months to be able to



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write legibly again and any physical activity beyond walking was mentally exhausting. I knew I would have to work hard at this.

Physically I like to be active and not being able to do things was initially frustrating. If I wanted to go for a run, I would have to tax my brain thinking really hard about running and five seconds later I would move. To continue this momentum I would have to keep up this train of thought and after around five steps I would fall over. My balance was all over the place, it felt like I was running on ice. Still, I persisted, and around a month after the accident I managed my first 5K. Everything improved slowly over time, and at seven months I managed to run the Cardiff half marathon. The ultimate physical test was at one year when I went snowboarding again. Physically I was back.

Mentally rehab was even more difficult. I started back at work on a phased return around four months post-accident. I found myself easily tiring and so it was hard at first. Just like the running it became easier day by

day as I acclimatised and got back into the swing of things. My hospital looked after me very well, they took my return slowly and checked up on me regularly. I wanted to prove to myself as much as everyone else that my brain was still up to it. So at nine months I sat MRCP part 2 and managed to pass. Revision or simple mental tasks are very good for the recovering brain. My Neurologist recommended *Brain Injury Work Book* by Powell and Malina, I found this hard to locate online so I used the MRCP revision book *Rapid Review of Clinical Medicine* by Sharma and Kaushal. It worked for me. After the exam I was back to working full time although my Neurologist (Dr R Kent) did not want me working night shifts till at least one year post accident. This allowed the risk of me developing post traumatic epilepsy to be kept to a minimal as possible level.

At one year I was put on the emergency unit full rota. Truth be told I didn't know how my brain would cope over my first set of nights. So starting with a four day Easter bank holiday wasn't ideal but I managed fine. I guess I'm back mentally as well.

This incident has taught me a lot about medicine and life in general. I now have an even greater empathy and understanding for anyone who has sustained a head injury whatever the severity. In my case it took a lot of hard work and even more luck for me to get to be where I am. I hope others who have suffered with brain injuries can read my story and see that there is a chance that they can reach a good outcome. Although frustrating, time is the only thing that can truly show the final neurological outcome. So I recommend be patient, trying to be strong and hold on.

The message I pass on to my medical colleagues is that every head injury is individual and no matter what grade of injury the recovery/outcome is unique and must be handled on an individual basis. Recovery can be so vastly individual, sustaining a mild head injury can result in a lifetime off work when severe head injuries might require minimal time off work. Studies have shown that there are limited prognostic markers beyond the initial phase of recovery. In the end it is only time that will show how much neurological recovery is possible and rushing the process does not help and can often hinder it. That's why as physicians we also have to be patient and treat patients on an individual basis focusing on their unique concerns and expectations.

I am grateful for all that I have learned from this experience (even though it almost killed me) and will strive to use this knowledge to better my medical practice as well as that of my colleagues. The incident has also got me thinking about other issues such as life and philosophy, but that is another article. All I will say is that sometimes life will get you down and ultimately there isn't too much you can do about it, so just accept it is what it is and get on with it.