



Visual Perceptual Therapy Case Study



ANDREW A VERY CHALLENGING CASE

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Andrew is probably the most challenging traumatic brain injury case I have ever worked with.

Andrew worked as a mini-tanker driver and had blacked out and fallen off an excavator approximately 4 years previously. He had fallen around 3 metres onto his face and had broken most of the bones in his face. However, no one had ever mentioned to him the potential for a brain injury and he hid the symptoms of this injury for the 4 years, until I first met with him. To this day I think Andrew thought he had some sort of mental illness, and he continued to say that he thought this was just him and the way it was going to be.

It was immediately obvious to me, in my first meeting with Andrew that he was in dire straits. He sat turned away from me and did not make eye contact. He was rather aggravated that he had been put off work. It turned out that his employer knew that something was not right and had arranged for him to see an occupational physician, who had raised the question that Andrew had suffered a traumatic brain injury. It was apparent to me that the past 4 years had taken an extraordinary toll on Andrew and that he was stressed, distressed, and undoubtedly depressed.

Andrew advised that he had had problems with his eyes since his accident. He had initially been told there was nothing wrong with them, but further investigation revealed that he his eyes were not working well together. He had glasses with prisms in them, to compensate for this, but it subsequently turned out that there was much more going on with his eyes than anybody had realised.

Andrew was put on a comprehensive rehabilitation programme, which included both physiotherapy and psychological services, along with occupational therapy for the Visual Perceptual Therapy. A worksite assessment was conducted to determine the demands of Andrew's job, as the goal was to get him back to work. Andrew had advised that he suffered a lot of headaches and he said that he thought they were related to the physical demands of the job, namely pulling the fuel hose off the tanker and moving it around.

The physiotherapist gradually began increasing Andrew's activity levels as he had essentially been sitting at home, doing nothing. He was initially resistant to this because he believed so many of his symptoms were caused by physical activity. However, it quickly became apparent that this was not the case and he became very engaged in a gym programme and began walking up to 8 kilometres a day.

As soon as I began working with Andrew in addressing his neuro-cognitive issues it was apparent that the usual treatment regime was not going to work for him. Andrew's vision was incredibly sensitive to any visual loading; and so began a process of modifying and presenting tasks in ways that a positive impact could be had on his cognitive performance, without excessively provoking his visual issues. I began seeing Andrew on a weekly basis and for shorter sessions – he could really only tolerate 20 – 30 minutes of the Visual Perceptual Therapy tasks, and then we had to stop.

We discovered that colour, and contrast between light and dark were triggers for Andrew's visual issues, along with the amount of sensory loading he as exposed to. I was able to work with him and he made significant progress with his cognitive performance; however, he needed to see an optometrist who specialised in working with people with traumatic brain injuries. This was to provide Andrew with the means of screening out some of the visual loading so that his neurology had some the space to adapt and improve around his visual issues.

It was apparent to me that there were two separate issues going on with Andrew. While both were neurologically based, one was an issue of his actual eye function and the other was within his perception and performance. Both factors interacted with one another where loading his perception caused his vision to fail and, when his vision failed, his cognitive performance also declined. I found myself wending my way through Andrew's triggers in order to have a positive impact on his

cognitive performance. It turns out that the optometrist found the same thing that I did, and also had to complete her assessment over two sessions, because of how quickly (and with little provocation) Andrew went into sensory overload and his vision failed to the point where he could no longer engage in the assessment.

I also arranged for Andrew to see a neurologist. There had been no satisfactory explanation for him blacking out prior to him falling. I also felt it was critical that any other potential neurological issues were ruled out. Driving fuel tankers is a heavily regulated industry in New Zealand and a clearance from a neurologist prior to a client returning to work following a traumatic brain injury is a must for me. I have worked with the New Zealand Transport Authority before on these issues and have developed a process that more than satisfies their requirements for someone to retain their driver's license/s following a traumatic brain injury. It also turned out that my contractual relationship with the company I was working with changed, meaning I would not be able to continue to work with Andrew. It became even more important that he had the necessary medical oversight to support him in his rehabilitation.

Andrew also had an excellent GP. This GP had a sister who had suffered a traumatic brain injury, so he had carried out a lot of research into these injuries. He put Andrew on to Escitalopram, an anti-depressant that has a particularly good effect on the anxiety that often arises in conjunction with sensory overload. This is a medication I now routinely suggest to GP's in these situations, because it is so effective.

I continue to maintain contact with Andrew even though I am no longer treating him. It seems the optometrist provided him with glasses that would let him continue with the Visual Perceptual Therapy, despite Andrew telling her he was no longer receiving this. I had suggested that they give him frames and a variety of differently graded coloured lenses, which attached magnetically. This was so that he could choose what worked for him in the moment, because his day to day visual experience is so variable.

Andrew did see the neurologist and he was not so impressed with the report that was written as a consequence of that. The neurologist seemed caught up in the idea that Andrew's symptoms were associated with the trauma of falling when he suffered his initial injury. While Andrew admits to being somewhat fearful of heights now, this has not presented as a significant injury. I am always concerned when healthcare professionals comment outside their area of expertise. Over the years I have had numerous experiences where neurologists have done this, and some have resulted in rather negative consequences to the client. Andrew's issues are very definitely a combination of visual disturbances due to an occipital lobe brain injury and sensory overload, also because of the traumatic brain injury. His stress levels occurred as a consequence of how these issues have impacted upon him, rather than them being causative.

It is going to take time for Andrew's neurology to adjust to the demands of everyday life again. His neurologist has told him it could take 6 months to a year and, unfortunately, this is probably true. His mood levels, however, are excellent and very significantly improved from when I first met him. Andrew continues with his walking and gym programme and tells me that he feels physically better than he has done in years.

If anything, Andrew's case is a clear lesson in why everyone with a traumatic brain injury needs to be seen as an individual. It also highlights the value of a functional diagnostic process, because the wider nature of his visual disturbances would not have been identified without this. Nor would we have been able to address his cognitive deficit without such a functional approach.

I have felt all along that Andrew would ultimately recover from his injury, it is just a matter of time, and he seems to be very acceptant that this is the case.