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CREATING A VIRTUAL REALITY IN HYPNOSIS: A CASE OF DRIVING PHOBIA

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Abstract

This is a case study of a 55-year-old married woman who had a severe driving phobia with a concomitant reduction in her mobility. She had been involved in an accident on the motorway but did not develop phobic symptoms until after the second incident – a near collision. The treatment consisted of a systematic desensitization of driving scenarios in hypnosis: after sixteen treatment sessions, the patient made a complete recovery and was able to drive on all public roads. Following each session, the patient was encouraged to practise her driving in the presence of her husband who was a skilled driver. In hypnosis, the patient was able to create a world of vivid imagery using all sensory modalities; and it was this verisimilitude, akin to 'virtual reality exposure therapy' (VRET), that contributed significantly to her complete recovery.

Key words: driving related fear (DRF), motor vehicle accident (MVA), non-motor vehicle accident (non-MVA), safe place, virtual reality exposure therapy (VRET)

Introduction

Driving phobia is classified as a specific phobia, situational type in DSM-IV (American Psychiatric Association, 1994) in which the patient often experiences high levels of anxiety that increase when (s)he anticipates, or is exposed to, stressful driving situations (Wald and Taylor, 2000). Invariably, this leads to avoidance behaviour in which the patient goes to great lengths to prevent this anxiety. Unfortunately, the avoidance behaviour perpetuates the phobic disturbance which then becomes entrenched: in the absence of any therapeutic intervention, this impinges on the patient's lifestyle and may cause a serious reduction in the patient's mobility.

The literature on driving phobia has concentrated on patients who have become phobic subsequent to one or more motor vehicle accidents (MVA); but, in fact, a driving related fear (DRF) is not necessarily a function of previous accidents (Taylor and Deane, 1999). When comparing MVA patients with non-MVA patients, it was found that there were no significant differences between the two groups in terms of the severity of physiological or cognitive components of fear as measured by Öst and Hugdahl's 'Bodily Reactions' and 'Negative Thoughts' subscales from their 'Phobic Origins Questionnaire' (1981). It has been found that patients in the non-MVA group have frequently suffered criticism from family members, which has contributed to a driving phobia (Taylor and Deane, 2000).

The use of in vivo desensitization has a number of drawbacks when applied to the treatment of driving phobia. The main objection is that these patients experience high levels of anxiety and, due to the unpredictability of the roads, are at a greater risk of causing, or being involved in, an accident. The great advantage of hypnosis is that, as soon as anxiety levels rise appreciably, the imagined scene can be withdrawn and the patient can return to the security of the safe place (Callow, 2003). In this way, the patient is able to exercise control over the virtual world that he or she has created in hypnosis. In addition, many patients find in vivo desensitization unacceptable and drop out of treatment.

Computerized learning has been used effectively in the treatment of driving phobia. 'Virtual reality exposure therapy' (VRET) is an effective treatment programme which makes it possible for patients to experience a real-time, computer-generated, three-dimensional environment that simulates real life (Rothbaum, Hodges and Kooper, 1997; Wald and Taylor, 2000). The user participates in a graded series of driving scenarios in a similar way to the construction of a hierarchy for systematic desensitization (Wolpe, 1958). Not only has VRET been used for the treatment of driving phobia but it has also been found to be effective in phobias such as agoraphobia (North, North and Coble, 1996), flying phobia (Rothbaum, Hodges, Smith, Lee and Price, 2000), acrophobia (Rothbaum, Hodges, Kooper, Opdyke, Williford and North, 1995) and arachnophobia (Carlin, Hoffman and Weghorst, 1997).

VRET relies on a computerized programme involving a sequence of driving scenarios; however, a similar approach can be employed in hypnosis. In the present study, the patient was given a series of driving scenarios that were graded in severity, starting with relatively easy situations and eventually proceeding to the most difficult. In hypnosis, it is important that the patient describes meticulously each driving scenario, and it is this attention to detail that helps the patient to simulate a 'real experience'. When the patient recounts how (s)he is feeling – which may include any of the sensory modalities – the process involves a careful description of each set of traffic lights, every turning, each roundabout and the names of the roads. The descriptions contribute, like the virtual reality environment, to the feeling that (s)he is actually there; however, as the treatment progresses, the patient no longer needs to exercise this careful control.

Case study

Mrs A was a 55-year-old married woman who was referred for treatment for a severe driving phobia. Six years earlier, she was driving on the M25 when a car collided with her, the driver of this other vehicle having joined the motorway from a slip road on the left without looking. The impact sent her car into a spin but, although the car was damaged, she did not sustain any physical injury, nor did she, at this stage, develop any psychiatric symptoms. Mrs A was, however, involved in a second incident: on this occasion, while driving on the A10, the car in front of her performed an emergency stop. Mrs A decided to overtake this car only to find that a Canadian goose was directly in front of her. She drove on, but she was not sure whether she had injured the goose, or even killed it, and this worried her. Her phobic symptoms began to develop after this second incident.

In her first consultation, Mrs A told me that she had been completely unable to drive on holiday in Devon and that she was now looking for ways to avoid using dual carriageways or motorways. She was only able to travel a mere 100 yards on the A10 – which was necessary for her to get to work – and she was cross with herself for feeling

unable to drive on dual carriageways.

Mrs A was apprehensive about the concept of hypnosis and feared that she might have amnesia for the whole event. I reassured her that she was unlikely either to be a 'deep trance subject' or to suffer from amnesia following the hypnosis session.

In her first hypnosis session, Mrs A was able to achieve an adequate level of relaxation. When I asked her to describe her safe place, she immediately said that she wanted to be back in Devon as she was particularly fond of this part of the country. Even in this first session, she was able to give a vivid account of being in the farmhouse where she normally stayed, and of walking on Dartmoor with her husband. When describing these scenes she felt that she was actually re-living this experience in Devon, and it was very clear that she was enjoying this immensely. I did not need to give her any assistance, as she was able to give a vivid description of Devon on her own. At this point, I asked her to imagine driving along an easy route, and she described, with a similar amount of detail, a journey towards Welwyn Garden City: she described each road, each set of traffic lights, specific turnings and the names of each individual road. However, at this stage, she was unable to imagine driving along a more difficult route.

After the hypnosis, Mrs A told me that she had attempted to drive towards Barnet for her treatment session; however, she only managed half the distance and then had to ask her husband to drive for the remainder of the journey. I made it clear to her that, for the present, she would either need a driving instructor or an experienced driver to sit next to her when driving. Her husband made the observation that she was much better when driving in heavy traffic conditions but seemed to be worse on the open road where there were no cars in front of her. I put forward the suggestion that she might be worried about being involved in a further accident and that she feared being out of control. Nevertheless, I still encouraged her to practise driving as much as possible between sessions, although I left it up to her to decide how much she could manage.

When she came for her second hypnosis session, Mrs A was pleased to report that she had managed to drive all the way from home to the consulting room in Barnet with her husband sitting beside her. At times, she had been perfectly composed, but, at other times, she had become panic stricken. She wanted to know whether she was supposed to be honest and to report all her feelings, or whether she should say what she felt I wanted to hear. I made it clear to her that she should be perfectly honest at all times. In the hypnosis that followed, again we started off with the safe place, which, on this occasion, was walking along the cliff top on a coastal walk in Devon. She could feel the breeze coming towards her and she said that she particularly enjoyed walking there with her husband. Having established that she felt perfectly comfortable on this walk, we then practised, under conditions of hypnosis, driving home from Barnet, as well as driving on the A10 dual carriageway.

After a very enjoyable holiday in Italy, Mrs A came for her third hypnosis session where she was delighted to report that she had been able to drive on the A10 once more. She wondered whether this was just 'a one-off event' and whether she could repeat this on a subsequent occasion. I assured her that she had made considerable improvement already, and that this could be replicated on the next occasion.

In the hypnosis, she again experienced the coastal walk with her husband and described it in great detail; but, on this occasion, she decided that she wanted to walk down the cliff to the bay below. We then rehearsed driving along the A10 and she was surprised that this had become quite easy for her.

When she arrived for her fourth session she was not as composed as she had been in the previous week. Returning from the consulting room on the last occasion, she had

managed to drive home; but then her husband had suggested driving further north on the A10 towards Hoddesdon where she became apprehensive once more. I stressed that it was important that she had made the attempt even though she was not too pleased with the result.

In the hypnosis that followed, Mrs A was transported once more to Devon with her husband: on this occasion, she wanted to wander through the fields where there was nobody around, and this gave her a tremendous feeling of freedom. Once she felt perfectly happy walking in Devon we rehearsed driving along the A10 to Hoddesdon. A week later, immediately before her fifth hypnosis session, Mrs A complained that, though she had made definite progress in treatment, she was not 'perfect' yet. I explained to her that one has to pass through a number of intermediate stages before becoming fully competent, but she was not willing to accept this line of argument.

When Mrs A arrived for her sixth hypnosis session, she told me that her husband had had to be rushed to hospital after collapsing following a hernia repair operation. It was important to get there as quickly as possible and, in this situation, she found that she was able to drive on the A10 without any difficulty or hesitation. I indicated to her that phobic patients can cover large distances if there is an urgent need, but this does not necessarily mean that they can do this on other occasions. She did mention, however, that driving home after the previous consultation had not created any problems, and I congratulated her on this achievement.

In the hypnosis that followed, we spent the first ten minutes recreating the scenery in Devon. She described walking through the fields with her husband and again she enjoyed the freedom of being away from roads and traffic.

When she arrived for her seventh hypnosis session, Mrs A admitted that she had made good progress with regard to her driving on the A10 dual carriageway; however, she was most reticent about her progress and again complained that she was not 'perfect'. She was reluctant to acknowledge her progress even though she had made a considerable improvement since the start of her therapy. By contrast, after she had received hypnosis – and on this occasion she chose an unspoilt cliff walk in Cornwall as her safe place – she was prepared to recognize the tremendous progress that she had made in her driving ability compared to her pre-treatment status.

A week later she had intended coming to tell me that she was ecstatic about being able to drive repeatedly on the A10 as well as on the M25 towards Essex; however, her mood had been somewhat deflated when she learned that the surgeon had strongly recommended that her husband should have a cholecystectomy. We spent the session talking about this, and I felt that hypnosis was not indicated on this occasion. I suggested that, after hearing their description of the surgeon's comments, it would be wise for him to have this operation as soon as possible.

Having rehearsed driving from her home in Cheshunt to Devon, which involved using not only the M25 but also the M3, A303 and A30, she was delighted to report that she had been able to drive all the way without any problems whatsoever. Interestingly, on holiday, she drove constantly and would not allow her husband to drive at all. She recognized that her driving was quite good now, but she wanted to continue the sessions because she felt that she needed a 'prop'. She wished to come once a fortnight, and I agreed to this.

In the eleventh hypnosis session, Mrs A said that her driving was 'nearly 100%' but she really wanted to be '150%' before ending the treatment. She was still somewhat apprehensive about overtaking a lorry and going from the inside lane to the outside lane, especially when vehicles suddenly appeared in front of her. In the hypnosis that followed, we rehearsed this scene, but I pointed out that she should not be 100% relaxed in a

situation requiring concentration.

When she arrived for her thirteenth session, she said that she had not coped very well driving on the A10 at the precise point where she had previously had the encounter with the goose. I recommended to her that we would have to do some work in this area, and said that we would have to introduce a 'hazard factor'. In the hypnosis that followed, where again she envisaged being in Devon, she asked whether the 'hazard' had to be running into a goose, and I said not. She then gave me the scenario that a car would enter the motorway from a slip road on the left, which was what had actually happened in the original accident, and she seemed to cope very well with this in hypnosis: she imagined slowing down and swerving in order to miss the ongoing vehicle. I felt that she had managed the situation very well.

In the fourteenth hypnosis session, Mrs A said that she was most unhappy about driving along the stretch of road where she might have killed the goose. I felt that it was essential that we practise a series of situations, seeing animals crossing the road in front of the car. I gave her the following scenarios:

- a squirrel darting in front of the car and her managing to avoid it;
- a squirrel darting in front of the car and her hitting and killing it;
- a pigeon being run over.

She felt most uncomfortable practising these scenes and felt her heart rate rising. After the hypnosis, she admitted that she had never coped very well with dead animals and that this had been present since early childhood. I pointed out that it was important to deal with this area because it seemed to be interfering with her ability to drive along this particular stretch of road. I had to take her back to the safe place at frequent intervals and, as soon as she could see herself walking on Dartmoor with her husband, she was able to calm down considerably.

In the fifteenth session, two weeks later, Mrs A said that on the whole she was now capable of driving on most roads but she was still somewhat concerned about a stretch of road on the A10 where there was a slip road on the left which joined the dual carriageway. In the hypnosis that followed, we spent some time recreating a scene in Devon where one could walk to a small island when the tide was out. She enjoyed telling me about the hotel and the local public house situated on the island. We then spent some time going over the particular stretch of road, which was difficult for her, and we had four attempts at this, alternating these with the safe place in Devon. When she came for her sixteenth session, three weeks later, she told me that she had been able to drive 'naturally' along the same stretch of road that had caused her so many problems in the past.

Mrs A booked a further appointment for three weeks later but, in the end, she rang to say that her driving was now 100%, and she felt that it was not necessary for her to have further treatment. She was very grateful for the treatment and recognized that she could not have achieved this on her own.

In a telephone follow-up interview, six months later, I asked her about her driving, and she said one word – 'fantastic'. She had made a complete recovery from her driving phobia.

Discussion

There are several approaches to the treatment of driving-related fear (DRF). The common denominator in all of these involves fear reduction through systematic desensitization.

In phobic disorders, one of the important features is a need for control. Salzman (1982: 27) argues that the content and setting of the phobia are of secondary importance. He states that

> the phobic object or situation is an accidental or coincidental accompaniment of a severe state of anxiety at a time when the individual has experienced the possibility of losing control.

The patient described in this paper experienced high levels of anxiety and a fear of loss of control in two previous driving incidents. It has been a frequent finding of the senior author (TK) that phobic symptoms often emerge following a second accident, after being primed by the first accident (Kraft and Al-Issa, 1965). In the second incident of this study, the patient was worried that she might have killed a goose, and this had the effect of reactivating a childhood fear of dead animals and this was addressed in the treatment.

In therapy it was apparent, even in the first hypnosis session, that this patient had an ability to project herself, with tremendous clarity, into the imagined situation – walking along cliff tops, across fields, into a local public house – as if she were actually there with her husband. In a similar way, she was able to describe her various driving routes in graphic detail; and, as the treatment progressed, it was possible for her to describe longer and more difficult journeys without having to refer to minute detail. The object of VRET is to provide a realistic scenario where the set of variables can easily be changed at will. It is argued that what the patient does in hypnosis can be controlled in exactly the same way; and, as with the computer, when the patient experiences high levels of anxiety, the situation can always be withdrawn and (s)he can return to the safe place.

A number of authors have recommended VRET as an effective form of treatment for a variety of phobic disorders: they argue that a great advantage of the virtual reality situation is that it simulates 'real' life and that the patient can experience all the sensory modalities (Rothbaum et al., 1997). This is also the case in hypnosis. The patient in this study made a complete recovery from her driving phobia and this may well have been a function of her ability to create, and engage in, a 'virtual reality' during all the hypnosis sessions.

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