EMDR and the Treatment of Medically Unexplained Symptoms: A Case Study

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Abstract
This current research used a single case study design to examine how Eye Movement Desensitization and Reprocessing (EMDR) was effective for one individual experiencing medically unexplained chronic pain in his abdomen. EMDR is briefly explained as is how it has been adapted to be used with pain. A brief literature review is also included.

Keywords
EMDR, pain, medically unexplained symptoms, trauma, primary care

Introduction
This case study looks at how Eye Movement Desensitization and Reprocessing (EMDR) was effective for one individual experiencing medically unexplained symptoms (MUS) of chronic pain in his abdomen. EMDR is briefly explained as is how it has been adapted to be used with pain. The case study will hopefully give professionals working in a primary care environment an additional treatment option for this at times difficult to manage client group.

The Royal College of Psychiatry define MUS as “Persistent physical complaints that do not have a readily recognizable medical cause. The pain, worry and other symptoms are nonetheless real and cause distress.” According to the Royal College of Psychiatry, people of all ages with MUS present frequently to the health services and state that contacts with primary care clinicians may be at least 50% more frequent per person than in the general population, and they may also account for up to 33% more secondary care consultations. From a monetary point of view, MUS have been estimated to cost the National Health Service (NHS) in England £3 billion every year.

Research suggests that up to 70% of people suffering with MUS will also suffer from depression and/or anxiety disorders. In addition to the distress caused to the individual, many health professionals feel frustrated and ill-equipped to tackle clinical presentations with no physical pathological cause. At times, individuals with MUS are debilitated by their conditions, are unable to work, and have poor quality of life.

Generally, treatment of MUS is managed within a medical setting with referrals for psychological input limited. However, the spiraling cost of managing patients with MUS has led to more resources being made available to address this problem from an emotional and psychological perspective.

What Is EMDR?
Eye Movement Desensitization and Reprocessing, EMDR, was developed by Francine Shapiro 25 years ago. It is a type of psychological therapy that was originally designed to alleviate the distress of traumatic memories. The most concise definition is taken from the EMDR Institute (n.d.) website:

Shapiro’s (2001) Adaptive Information Processing model posits that EMDR facilitates the accessing and processing of traumatic memories to bring these to an adaptive resolution. After successful treatment with EMDR, affective distress is relieved, negative beliefs are reformulated, and physiological arousal is reduced.

During a typical EMDR session, the client focuses on emotionally disturbing material while focusing on an external stimulus in the form of therapist directed eye movements, audio stimulation, or tactile stimulation to create bi-lateral stimulation (BLS) of the brain. Shapiro (2001) believes that following treatment of EMDR on a traumatic memory, information processing is enhanced and new associations are forged resulting in new learning, elimination of emotional distress, and development of cognitive insights.

Brief Review of the Literature
A full in-depth theoretical underpinning of the use of EMDR in the treatment of MUS can be found in van Rood and de...

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Roos (2009) and in Grant (2009). Van Rood and de Roos (2009) believe unprocessed traumatic experiences might maintain physically unexplained complaints, and triggers to that unprocessed traumatic experience trigger not only the memory but also physical sensations (e.g., pain) that were experienced at the time. Both authors note that the meaning may either trigger a traumatic memory or the pain. This can represent a kind of trauma in itself. This two-way interaction between pain and trauma is thought to maintain both (see also Grant, 2009).

Ray and Zbik (2001) review the use of EMDR therapy for chronic pain and note that EMDR gives benefits to chronic pain patients not found with other treatments. They found EMDR can do more than just manage pain but can substantially reduce or eliminate it.

Grant and Threlfo (2002) outline how EMDR can help to improve coping and reduce chronic pain and suffering. They examined the use of EMDR with three adult chronic pain sufferers and noticed that all clients reported substantial decreases in pain levels, decreases in negative affect, and increased ability to control their pain. Similarly, Hassard (1995) describes how EMDR helped 12 out of 19 patients who completed treatment to significantly reduce their pain. Mazzola et al. (2009) also found pain tolerance was significantly improved for the two treatment groups using EMDR.

EMDR and Pain

Within EMDR, the Adaptive Information Processing (AIP) model views chronic pain as a kind of recurring “trauma” with the traumatic event consisting of recurring pain attacks or constant physical discomfort (EMDR Part 3 Training Manual Courtesy of Alexandra Richman, n.d.). Mazzola et al. (2009, p.75) note, “EMDR treatment of chronic pain includes the processing and desensitization of both; the automatic emotional response to the pain sensation, and the automatic components of the stored memories related to the etiology of pain.” Grant (2009) also notes that chronic pain can represent a kind of trauma in itself as pain can involve feelings of helplessness, intrusive thoughts, loss of control, and increased physiological arousal.

Grant’s (2012) chronic pain protocol divides the targets into trauma, pain, or some aspect of how the pain is affecting the person’s life. As with trauma, the Negative Cognition (NC) reflects how the person feels about themselves. The positive cognition represents what they would like to be able to say about themselves. Other elements of the target, such as feelings sensations and subjective units of distress (SUD), are more or less the same with the exception that the SUDs may be used to rate pain or emotional distress.

Once the above information has been gathered, BLS (e.g., eye-movements/tactile sensors) is used to desensitize the client by asking them to focus solely on the pain. During desensitization, if any blocking beliefs are identified, cognitive interweaves (such as asking the client to imagine that they can see inside their bodies and see what is causing the pain, or asking what is stopping the pain from changing) can be used. Desensitization continues until the clients’ pain has reduced. Once the pain has stabilized at a more tolerable level, installation of a positive imagery related to what the client experiences now is completed, followed by the installation of the positive cognition.

Unlike the standard EMDR protocol, when using the pain protocol, we are not necessarily expecting to reduce the rating (SUDs or level of intensity) down to a 0 or 1. In most cases, a reduction in the intensity of the pain, or a reduction in the hold the pain has on an individual’s general level of functioning, is a welcome enough change. By giving clients a greater understanding of their pain, and a degree of control over their pain, the client comes to believe that they can have more control over the pain and its effects on their life.

Case Background

Full written consent was obtained from the client prior to writing this article. Names and identifying details have been changed.

Michael contacted me through my private practice following his search for an EMDR therapist. He had tried for nearly 3½ years to get some sort of explanation for the pain emanating from his stomach/abdomen and to learn how to better manage his pain.

History

Michael is a White British male who at the commencement of treatment was in his late 50s. Over 4 years prior to treatment, Michael was the driver of a car involved in a road traffic accident in Africa which left him paralyzed from the chest downward due to a dislocated neck and a complete break of the spinal cord (injury from C6). Michael was in Africa to run a marathon and was an accomplished athlete with an international reputation in extreme sports.

Following the accident, Michael spent 2 weeks in hospitals in Africa before being flown back to England. Following a 10-month stay in an NHS spinal injuries unit, he returned home. It was at this time that the pain in his stomach started. He reports that he received no psychological help while in the spinal injuries unit.

Michael reported that he generally felt quite anxious, more so in the mornings. He had very little recollection of the actual accident, remembering tiny snippets only and had never had nightmares, and reported occasional flashbacks of the moment when his friend shouted in the car just prior to impact. Initially after coming home, he continued to work in his role as an IT Manager but eventually the pain got intolerable for him and he left his job.

At the commencement of treatment, the pain in Michael’s abdomen was causing significant disruption to his everyday activity level—he would try and do a bit of work, but very
soon, the pain and discomfort became too much. Similarly, it was restricting him going out and doing any sort of exercise to strengthen his muscles. Michael had a good social network but found that he often had to cancel social engagements at the last minute due to pain flare-ups.

Prior to seeing myself, Michael had seen two psychologists and a hypnotist, all without much benefit.

On taking a full history, there were no significant traumas prior to the index incident. For the memories of the accident, Michael scored 24 on the Impact of Events—Revised scale (Weiss & Marmar, 1996) indicating that there was no significant psychological trauma associated with the index incident.

**Treatment**

Following our initial assessment session, our second session commenced with trying to help Michael install a “safe place”—a psychological resource of a memory or image in which Michael felt safe, calm, and relaxed, together with a word that summed up that image and associated feeling. Although Michael did not appear to be traumatized by the accident itself, a psychological resource in which he could feel calmer may help him cope with his fear of uncontrollable pain. We also tested which method of BLS would work best with Michael. Initially, I tried eye movements, and then ear phones and then tactile sensors. Although I was initially reserved about using the tactile sensors due to the location of spinal cord damage, Michael felt these, turned up to high intensity, worked best for him.

As there was clearly a traumatic index incident, standard EMDR protocol was used prior to introducing the chronic pain protocol to rule out that there was no residual trauma fueling Michael’s pain. Michael identified the worst picture from the accident as his friend shouting his name, with the associated negative belief of “I’m stupid,” feelings of dread, and SUD as 5 to 6 out of 10, which he felt in his head. When using BLS, he initially felt upset, but generally noticed very little change. After a few sets of BLS, Michael reported feeling less distressed by the image and he had a new memory emerging of being in the embankment where the car came to rest following the accident. He noticed that nothing changed in his body.

At the next session, and for the majority of sessions following that, we focused solely on the pain in Michael’s abdomen. We discussed the memory of when he first noticed the pain (on returning to his home after a prolonged stay in the spinal injuries unit) and subsequent memories of when the pain was bad. Negative cognitions varied but focused around not being in control and believing he was worthless (“I’m a waste of space”). As our work progressed, the negative cognitions changed to “I’m Helpless.” Later sessions also identified negative cognitions focused around self-blame. General feelings were of frustration at not being able to perform activities of everyday living because of the pain.

On first targeting the pain using EMDR, Michael described the pain as a burning sensation—a pressure in his stomach as if it had been pumped up. The color of the pain was “red,” and the level of intensity was 8 out of 10. At the end of Session 3, our first session targeting just the pain, the level of intensity had reduced to a 5. Michael later reported that this relief continued for the rest of the evening after our session but the level returned to 8 and higher the next day.

At different times of the processing, Michael would experience intense pain and at times would feel he was holding back his emotions. By altering the speed of the tactile sensors, we discovered that if they went slower, then the pain would generally be less intense, but if they went faster, then the pain would become more intense.

Michael reported a whole range of different sensations and experiences over the course of our work. These, together with my own observations, are listed below, as they illustrate the variety of sensory changes that Michael experienced during his treatment:

- Twitching of his face, hands, and shoulders
- Getting emotionally upset
- Tension in his body
- Constantly feeling like he wanted to move his legs
- Changes in the pain—sharp, stabbing, pressure, tight, burning
- Changes in location and shape of the pain
- Feeling like something was going to burst out of his stomach
- Feeling more relaxed in his body
- Tingling in his body
- Leg feeling warm—since the accident, Michael has suffered from poor circulation and always felt his legs were cold (generally he does not get any feeling in his legs)
- Feeling like he wanted to move his foot or wanting to stretch
- Shudders of his entire body

On almost all occasions when using the BLS, the pain changed in terms of intensity, location, sensation, or type of pain. At times, these changes were associated with different feelings and levels of emotional distress. Toward the end of our sessions, it tended to take longer for Michael to notice any changes in the pain. Bi-lateral sets were increased considerably in length of time with good effect. During these sessions, the pain would build up, reach a peak, and then gradually subside again (similar to emotional distress when using standard EMDR protocol).

Once the level of intensity of the pain had stabilized at 2/10, the positive cognition of “I can handle it” was installed, which helped reinforce Michael’s belief in his ability to control his pain. As the pain became more manageable, the focus turned to current triggers of when he noticed the pain more (such as hearing his carers take a shower while he was stuck in bed).

In addition to EMDR, Michael’s treatment also incorporated Solution Focused Therapy (SFT) and Cognitive Behavioral...
Therapy (CBT). Using principles of behavioral activation, Michael was encouraged to start doing more activities even if he felt pain—that is, to just do something and see if the pain gets worse.

Michael had begun to be more aware of the pain and to notice times when it was not as bad and started to question why that was. Using principles of SFT, these “exceptions” of when the pain was not as bad were explored to see whether he could do more of what made the pain less (see Proudlock, 2011).

At our last session, Session 14, Michael expressed that he was no longer really bothered by the pain. Subjectively and objectively, he felt less depressed and the level of intensity of the pain was around a 3 out of 10. He had written a brief but angry goodbye letter to pain and felt that the pain was no longer consuming and controlling his life.

At 6-month follow-up, Michael reported he was no longer depressed but had suffered from repeated bladder infections, causing abdominal pain and discomfort. His main carer had left after working with him for 3 years, and this had clearly upset him. We embarked on six further top up sessions and used EMDR to process this loss and the associated feelings. Again Michael reported less pain in his abdomen. Michael had also signed up to a sponsored cycle ride in South Africa in November 2013.

Discussion and Areas for Further Research

There is a growing body of evidence indicating that EMDR is an effective psychological therapy in assisting clients with MUS. In this case study, EMDR helped an individual who had spent over 3 years looking for an explanation and relief from abdominal pain. The exact way EMDR works in general is still unclear, but one theory is that it decreases the increased physiological arousal that maintains pain through a relaxation effect (Grant, 2012).

Michael was a determined and motivated client who persevered through some demanding sessions. He welcomed articles on EMDR and found The Body Keeps the Score (van der Kolk, 1994) most useful. At one point, he had to face the realization that he saw himself as “helpless” and “dependent” on his caregivers for most of his needs, and this insight allowed him to see that some of his pain symptoms may be psychological in nature. On leaving a safe environment of the spinal injuries unit, the reality of his situation struck him once he was back home.

The outcomes of treatment for Michael were considerable—he was able to reduce the quantity of the high potency synthetic opiate painkillers he was taking as the pain became more bearable and his need for medication greatly reduced (prior to treatment he told me he was taking analgesics like “Smarties”). He also needed to take to his bed and lie down less often, was able to travel in the car more regularly without feeling sick (something that had caused great restriction in his life), and started to socialize more with friends. He even had some pain-free days which allowed him to do more exercise to strengthen his muscles and start hydrotherapy. From a psychological perspective, his negative cognition started to change to “I’m taking control”—at our last session, he told me, “I can do what I want even with the pain.”

In this case study, it is clear that EMDR had a beneficial effect when other therapies seemed to have not been helpful to Michael. Some of the extenuating factors that may have aided the benefit of EMDR may be the high level of motivation that client had—he had clearly researched EMDR before making contact with me. I also made it clear from the start of therapy that EMDR would not be a “cure” for his pain but may allow him to manage the pain more effectively, clearly managing his expectations for therapy.

Although EMDR was the primary therapeutic intervention in this case, the principles of CBT and SFT also played a significant part. Throughout my clinical practice, I rarely use just one type of therapy, preferring instead an eclectic approach that morphs itself into what the client needs at that particular time. EMDR may have been the catalyst that allowed the benefit of Michael’s other therapies to be fully utilized—in other cases, where I have used EMDR with clients who have had therapy before, EMDR seems to unblock something that enables increased clarity for the client, allowing the benefits of previous therapies to kick in.

A limitation of the study was the lack of objective measures to quantify the changes in Michael’s pain, anxiety, and functioning. Another limitation was the fact that it only involves one case. As such, with no control case to measure against, it is hard to tell whether Michael would have started to feel better with the passage of time irrespective of any therapy offered.

Conclusion

MUS are notoriously difficult to treat. This case study indicates that EMDR could have potential as a treatment for people with this kind of pain. Like other reports regarding EMDR treatment of pain, this case suggests that EMDR can help alleviate the pain and improve coping—traditional approaches do not tend to be very effective for pain relief. The amount of sessions required, in this case 20 in total, also indicates that EMDR can be more efficient than traditional approaches to pain management.

Although EMDR was the main modality used in this case, my own and other practitioners experience is that when used in conjunction with other therapies, the psychological benefits for the client seem to be magnified when a combination of therapies are used. The level of client motivation may also play a key part in the successful outcomes of EMDR for MUS—in this case study, the client was highly motivated and
already had some insight into the psychological mechanisms that may be interacting with his physical pain.

This case adds to the growing literature regarding EMDR treatment of chronic pain. More research is needed to investigate whether the method is efficacious with other MUS sufferers and whether EMDR needs to be considered as an option early on in treatment.

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Notes
1. Royal College of Psychiatry website, retrieved May 12, 2013: http://www.rcpsych.ac.uk/expertadvice/improvingphysicaalandmh/medicallyunexplainedsymptoms.aspx
2. Improving Access to Psychological Therapies website: http://www.iapt.nhs.uk/lcmus/medically-unexplained-symptoms/, retrieved May 12, 2013.

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