EMDR Treatment of Obsessive-Compulsive Disorder: Preliminary Research

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This article reports the results of two experiments, each investigating a different eye movement desensitization and reprocessing (EMDR) protocol for obsessive-compulsive disorder (OCD) and each with two young adult male participants with long-standing unremitting OCD. Two adaptations of Shapiro's (2001) phobia protocol were developed, based on the theoretical view that OCD is a self-perpetuating disorder, with OCD compulsions and obsessions and current triggers reinforcing and maintaining the disorder. Both adaptations begin by addressing current obsessions and compulsions, instead of working on past memories; one strategy delays the cognitive installation phase; the other uses mental video playback in the desensitization of triggers. The four participants received 14–16 one-hour sessions, with no assigned homework. They were assessed with the Yale-Brown Obsessive Compulsive Scale (Y-BOCS), with scores at pretreatment in the extreme range (mean = 35.3). Symptom improvement was reported by participants after 2 or 3 sessions. Scores at posttreatment were in the subclinical/mild range for all participants (mean = 8.5). Follow-up assessments were conducted at 4–6 months, indicating maintenance of treatment effects (mean = 7.5). Symptom reduction was 70.4% at posttreatment and 76.1% at follow-up for the Adapted EMDR Phobia Protocol and 81.4% at posttreatment and at follow-up for the Adapted EMDR Phobia Protocol with Video Playback. Theoretical implications are discussed, and future research is recommended.

Keywords: eye movement desensitization and reprocessing (EMDR); obsessive-compulsive disorder (OCD); treatment outcome research; Adapted EMDR Phobia Protocol; Adapted EMDR Phobia Protocol with Video Playback

Obsessive-compulsive disorder (OCD) is a psychological condition associated with anxiety and stress, experienced by about 1 in every 60 adults, 1.6% of the world population (Kessler et al., 2005). It can affect children as young as 6 or 7 years old and often first appears in adolescence (Heyman, Mataix-Cols, & Fineberg, 2006). There appears to be no difference in the incidence of OCD for men and women. Some research shows that OCD runs in families and that a genetic predisposition may play a role in the development of the disorder (Brady, 2003; Nauert, 2006). The World Health Organization (2011) has listed OCD in the top 20 most disabling illnesses in the world.

OCD is characterized by the presence of recurrent obsessions and/or compulsions that interfere substantially with daily functioning (American Psychiatric Association, 2000). Obsessions are "persistent...intrusive and inappropriate…and cause marked anxiety or distress" (American Psychiatric Association, p. 457). They can take many forms such as unwelcome thoughts, images, impulses, and doubts. Examples of obsessions include a focus on order and symmetry, thoughts about contamination, fears of harming self or others, and doubts about whether an action was completed. Compulsions are "repetitive behaviors or mental acts the goal of which is to prevent or reduce anxiety or distress" (American Psychiatric Association, p. 457). Examples of compulsions include excessive cleaning, handwashing, ordering, checking, counting, and mental compulsions. They are often performed in an attempt to alleviate the intrusive obsessions and reduce the fear, but actually increase anxiety (Heyman et al., 2006). A diagnosis of OCD requires that the obsessions and/or compulsions consume large amounts of time and impinge on important day-to-day activities.

Research suggests that OCD may be related to problems in communication between the front of the brain and the much deeper structures where serotonin is used as a messenger (Atmaca et al., 2011). It could be argued that a reduced level of serotonin is

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a contributing factor in the development of OCD, and antidepressant medications are often used in its treatment (e.g., Khouzam, Emes, Gill, & Raroque, 2003).

Treatment of Obsessive-Compulsive Disorder

In 1966, Victor Meyer reported on his successful treatment using exposure and response prevention with two individuals with washing rituals. Since that time, this treatment has been established as the therapy of choice for OCD (e.g., National Collaborating Centre for Mental Health, 2006). With many randomized clinical trials showing its efficacy, Exposure and Response Prevention Therapy (EX/RP) remains the most commonly provided treatment for OCD (Deacon & Abramowitz, 2004; Fisher & Wells, 2005; Franklin & Foa, 2011). A meta-analysis of OCD therapies was conducted by Rosa-Alcázar, Sánchez-Meca, Gómez-Conesa, and Marín-Martínez (2008). They reported that EX/RP, cognitive restructuring therapy, and a combination of the two were effective in reducing symptoms and showed similar effectiveness. They noted that EX/RP's simplicity makes it the treatment of choice for OCD and that further research is needed for cognitive therapy.

EX/RP involves exposing the individual to the feared situation and preventing the use of compulsions to reduce his or her anxiety, with both in session activities and daily homework (Foa & Kozak, 1997; Steketee, 1996; Steketee & White, 1990). This cycle of exposure and response prevention is repeated until the individual is desensitized to the obsessional anxiety and no longer performing ritualized compulsions. Franklin and Foa (2011) described current EX/RP treatments as typically including:

> prolonged exposure to obsessional cues, procedures aimed at blocking rituals, and informal discussions of mistaken beliefs that are often conducted in anticipation of exposure exercises. Exposures are most often done in real-life settings (in vivo) and involve prolonged contact with specific feared external (e.g., contaminated surfaces) or internal (e.g., images of having sex with religious figures) stimuli that the patient reports as distressing. (pp. 232–233)

Although EX/RP therapy can be highly effective for about 50% of people who complete EX/RP treatment, there are a number of recognized drawbacks (Maher et al. 2010). Individuals with OCD find EX/RP therapy challenging for a number of reasons. They may find it too frightening to face their worst fears; EX/RP is hard work, requiring homework completion; individuals may not be ready to change long-standing habitual behaviors; and, EX/RP therapy may not be as effective for individuals who experience obsessions without compulsions.

Assessment of Obssesive-Compulsive Disorder

The Yale-Brown Obsessive Compulsive Scale (Y-BOCS; Goodman et al., 1989) is considered the gold standard measure of OCD. It was developed as a clinician-administered measure, designed to rate the severity and types of symptoms. The Y-BOCS uses a 10-item scale, with each item rated from 0 (no symptoms) to 4 (extreme symptoms). The results of the questionnaire are categorized to provide a score for compulsions as well as obsessions, and these are added to provide the total Y-BOCS score. A total score of 0–7 is considered subclinical; 8–15 is mild; 16–23 is moderate; 24–31 is severe; and 32–40 is extreme.

The percentage of reduction in Y-BOCS scores is commonly used to evaluate improvement. The percentage of reduction is calculated by dividing the difference between pretreatment and posttreatment scores by the pretreatment score. Many OCD clinical trials have used percent reduction cutoffs on the Y-BOCS to determine treatment response, with cutoffs indicating good symptom response in medication trials at 20%–40% symptom reduction and cutoffs in cognitive behavior treatment (CBT) trials at 50% reduction (Tolin, Abramowitz, & Diefenbach, 2005).

Eye Movement Desensitization and Reprocessing

Eye movement desensitization and reprocessing (EMDR) is a therapy in which a structured approach is used to address past, present, and future aspects of disturbing memories. Shapiro's (2001) adaptive information processing (AIP) model, which provides the theory for EMDR treatment, conceptualizes psychiatric disorders as a manifestation of unresolved traumatic or disturbing memories. EMDR is recognized as an empirically based therapy for the treatment of posttraumatic stress disorder (PTSD), with approximately 20 randomized clinical trials supporting its efficacy for PTSD. Various meta-analyses (e.g., Bisson & Andrew, 2007/2009; Bradley, Greene, Russ, Dutra, & Westen, 2005) have found that EMDR is equivalent in effect to cognitive behavioral approaches such as exposure therapy and cognitive restructuring therapy in the treatment of PTSD. EMDR, exposure therapy, and cognitive restructuring therapy are all identified as first-line approaches for PTSD treatment in many

international guidelines (e.g., National Collaborating Centre for Mental Health, 2005; U.S. Department of Health and Human Services, 2011).

EMDR is administered according to a standard eight-phase procedure (Shapiro, 1995, 2001). Treatment starts with history taking, preparation, and memory assessment phases. If the client has difficulty identifying an etiological memory, the therapist can guide the client in a "floatback" technique to recall earlier events with similar affect and/or cognition (Browning, 1999). After this, the client focuses on aspects of the targeted memory while simultaneously engaging in eye movements for about 24 seconds, after which associations to other material (e.g., memory, affect, cognition, perceptions) are elicited. This procedure is repeated multiple times throughout the session and typically, these associations become more adaptive during the session. When the memory is desensitized (reflected in a rating of 0–10 on the Subjective Units of Disturbance [SUD] scale), the procedure continues with a focus on reprocessing related negative cognitions to strengthen a selected positive cognition. The memory is considered to be reprocessed when it no longer elicits any affective or somatic distress and when the client indicates that the positive cognition has high validity, as rated on the Validity of Cognition (VOC) scale.

Targeted memories are sequentially ordered, across sessions, in which the aforementioned procedures are applied according to a three-pronged protocol (Shapiro, 1995, 2001). First, the distressing past memories that are considered etiological to the disturbance are resolved. After this, the focus shifts to processing current triggers, which are environmental stimuli still eliciting distress. Finally, the treatment addresses future aspects of the disorder by incorporating a positive template for adaptive future action.

EMDR Treatment of Anxiety Disorders

Shapiro (2001) developed specialized applications of EMDR for anxiety disorders and phobias (Luber 2009a, 2009b; Shapiro, 2001, p. 228). Both applications sequence targets according to the three-pronged protocol, with past memories processed first, followed by current triggers, then by future action; each incident is fully processed according to the standard procedure. During the future template procedure in Shapiro's EMDR Phobia Protocol (Luber, 2009b), the therapist asks the client to "run a mental videotape" (p. 173) of the imagined future action to "incorporate a positive template for fear-free future action" (p. 171).

Although EMDR is established as an effective treatment for PTSD, there has been much less research on its application with anxiety disorders (Shapiro, 2001). In their comprehensive review, de Jongh and ten Broeke (2009) posited that the strong research base for CBT of anxiety disorders may have limited interest in the exploration and investigation of EMDR and other possible treatments. Also, with its focus on traumatic memories, EMDR may not have been considered a viable treatment for anything other than PTSD, even though disturbing events may have played a catalytic part in the initial onset of some disorders. For example, anxiety disorders often begin following a stressful life event (de Silva & Marks 1999; Kleiner & Marshall, 1987), and McNally and Lukach (1992) stated that many patients will also suffer PTSD-like symptoms as a direct result of their first panic attack. De Jongh and ten Broeke suggested that EMDR may be effective in treating anxiety disorders in which there is a specific disturbing or traumatic etiology—for example, the treatment of dog phobia following a dog bite.

There is some preliminary support for EMDR's effectiveness in the treatment of anxiety disorders. Limited research on EMDR treatment of panic disorder has showed some good effects (e.g., Feske & Goldstein, 1997; Goldstein & Feske, 1994). However, research on panic disorder with agoraphobia has yielded mixed results (e.g., Fernandez & Faretta, 2007; Goldstein, de Beurs, Chambless, & Wilson, 2000), with the suggested possibility that more work may be needed in the preparation phase of EMDR, so that anxious patients can better tolerate exposure to their fears during trauma processing. In a randomized clinical trial evaluating EMDR treatment of test anxiety, Maxfield and Melnyk (2000) found that in comparison to a waitlist control, a group of university students treated with a single session of EMDR showed significant improvement, with maintenance of effects at follow-up and a reduction in scores on the Test Anxiety Inventory from the 90th to the 50th percentile.

Several case studies have reported the successful EMDR treatment of specific phobias (e.g., de Jongh, van den Oord, & ten Broeke, 2002). Recently, a large randomized clinical trial (de Jongh, Holmshaw, Carswell, & van Wijk, 2010) compared EMDR (with self-initiated in vivo exposure) to trauma-focused CBT (imaginal exposure, with elements of cognitive restructuring, relaxation, and anxiety management) for 184 people suffering from travel fear and travel phobia following road traffic accidents. Participants in both groups were encouraged to confront anxiety-provoking stimuli between sessions. The mean number of sessions was 7.3, and both treatments resulted in equivalent effects, with

significant decreases in symptoms of anxiety, depression, and posttraumatic stress, and avoidance of travel.

EMDR and the Treatment of Obsessive-Compulsive Disorder

Although there have been anecdotal reports and occasional conference presentations (e.g., Allemagne, 2009) on the treatment of OCD with EMDR, little research has been done on this application. Bae, Kim, and Ahn (2006) presented two clinical OCD cases in which they were unable to demonstrate any measurable success with EMDR. The participants were two men, diagnosed with chronic OCD, who had shown no response to pharmacological or psychotherapeutic interventions. Bae et al. provided Parnell's (2007) modified EMDR protocol with both patients, identifying and resolving feeder memories, in accordance with Shapiro's (2001) AIP theoretical model that addressing etiological events with EMDR will decrease the client's symptoms. OCD symptoms were unchanged by treatment.

Böhm and Voderholzer (2010) described research by Bekkers, who in 1999 reported significant symptom reduction in 4 out of 5 compulsive patients treated with EMDR. Böhm and Voderholzer cautioned however that Bekkers performed EX/RP simultaneously with EMDR, "in unreported sequences, making it difficult to clearly assign the effects to a single therapeutic element" (Böhm & Voderholzer, 2010, p. 176). Bekkers reportedly described EMDR's contribution as the accessing of emotion and creating insight, with associative links between affect, compulsions, and their apparent purpose. EMDR was reportedly viewed by Bekkers not as a stand-alone therapy, but as a helpful adjunct in EX/RP therapy.

Böhm and Voderholzer (2010) investigated the effects of EX/RP 1 EMDR for three adults diagnosed with OCD while receiving 8–12 weeks of inpatient treatment. The first two patients received a course of either EMDR or EX/RP and then a course of the alternative treatment. This design allowed for the evaluation of the incremental effects of each treatment. The Y-BOCS (Goodman et al., 1989) was administered at pretreatment, after completion of the first course of treatment, and at posttreatment. The first participant was a 34-year-old man with checking compulsions. He received 6 weeks of EMDR, addressing traumatic experiences of abandonment during childhood, but apparently without addressing current triggers or future action with EMDR. There was a reduction in his Y-BOCS score from 36 to 32. This was followed by administration of EX/RP, with a reduction in his Y-BOCS score from 32 to 9. Effects were maintained at follow-up, and he reported that the benefit of EMDR was increased insight into his compulsions, with resultant ability to tolerate the exposure therapy.

The second participant was a 24-year-old woman with aggressive and sexual obsessions. She first engaged in 7 weeks of EX/RP, with a reduction in her Y-BOCS (obsessive thinking only) score from 16 to 12. This was followed by administration of 4 weeks of EMDR, focusing first on a traumatic fall in childhood, and then on an obsessive image. After EMDR, her Y-BOCS (obsessive) score had dropped from 12 to 8. Although at follow-up, the Y-BOCS score had increased to 11, she described much improved function. The third participant was a 27-year-old man with ordering and checking compulsions, with a fear of losing some possessions. He received 10 weeks of alternate sessions of EMDR and EX/RP. He reported no traumatic events in his history. His EMDR sessions did not follow standard procedures. Instead, a strategy that the authors called "the EMDR absorption technique (resource building)" (Böhm & Voderholzer, 2010, p. 180) was applied, in which he engaged in eye movements while simultaneously imagining successfully resisting the compulsive behaviors. His Y-BOCS score decreased from 35 at pretreatment to 16 at posttreatment, with effects maintained at follow-up. Böhm and Voderholzer (2010) recommended the use of EMDR as an augmentation method with EX/RP to assist clients in emotional mastery.

Current Study

The literature shows that clients treated with EX/RP have a 60%–80% reduction in OCD symptoms. About 25% of clients choose not to engage in this form of therapy when they realize that they will have to confront their fears. Consequently, when four patients were referred for alternative OCD treatment, it was decided to develop a treatment approach using EMDR. All four cases had previously been treated by health care professionals for OCD and had failed to engage successfully with the CBT practitioner. It was not possible to say whether this was as a result of the client being unprepared to change or whether the treatment was not optimally applied; whatever the cause, the participants were still struggling with severe OCD symptoms and unwilling/unable to participate in further CBT therapy. They had either dropped out of treatment or had been deemed as unsuitable for EX/RP or cognitive therapy by their individual therapist. Indeed it was reported by the referring source that the OCD symptoms in all four

cases appeared to have been exacerbated by the previous use of EX/RP and/or cognitive therapy.

It was hypothesized that EMDR could provide a viable and realistic treatment option for those suffering from OCD and that processing the overwhelming fears and ritualized behaviors at the epicentre of OCD could decrease symptoms of OCD. These hypotheses were based on research findings that a probable trauma in the client's past may be directly linked to the onset of OCD. They were also based on the main theoretical principle of the EMDR AIP model that posits that resolving disturbing memories will resolve related symptoms (Shapiro, 2001).

Additionally, it has been the therapist's experience that OCD is maintained by current thoughts and behaviors. He views it as a self-perpetuating disorder, composed of multiple linked complex behaviors, thoughts, and events, occurring in the present time. It was hypothesized that this pattern of self-perpetuating, self-reinforcing behavior could be effectively addressed by first processing the current triggers, obsessions, and compulsions, prior to targeting historical traumatic events.

Two adaptations of Shapiro's (2001) phobia protocol were developed by the author, the Adapted EMDR Phobia Protocol and the Adapted EMDR Phobia Protocol with Video Playback. These were tested in this study. Each experiment provided the treatment to two individuals who had not benefited from previous CBT treatment for OCD.

Experiment 1

Method

Treatment. The therapist was the author, and he is a qualified counselor with advanced training in CBT and at the time of this study, had been trained in, and using EMDR for over 2 years. Sixteen sessions were provided to each of the participants.

As with standard EMDR, a full client history was taken, thus providing the therapist with insight into the client's issues. Then in the preparation phase, the clients were prepared as per standard EMDR procedures with a calm place, and with the addition of an imaginal nurturing figure, strength figure, or a protection figure if needed. The stop signal was taught, and a dry run of the therapy was conducted using a minor issue with little subjective distress. The history taking and preparation phases were completed in two sessions.

The EMDR processing phases were administered using the specialized EMDR protocol developed by the author: The Adapted EMDR Phobia Protocol. In this adaptation, targets are desensitized in the following sequence: starting with the current triggers (OCD compulsions and obsessions), followed by the future template (imagining successful future action), and then by past-related disturbing memories (if any). Following desensitization of all targets, the positive cognition is developed and installed.

Assessment. The Y-BOCS was administered by the author at pretreatment and posttreatment. The follow-up administration was conducted by an independent nontreating psychologist at 4–6 months post-treatment. The participants' contact with the therapist had stopped at the end of treatment.

Participants. As described previously, two men with current OCD diagnoses were referred for treatment because they had not responded to previous CBT treatment of OCD. James was 28 years old; Michael was 24 years old. Note that client information has been altered to protect the participants' identities.

Case 1—James

James was a 28-year-old university graduate, who lived with one of his parents. His obsessions were about infection and the spread of disease; his related compulsions included checks for sexually transmitted infections (STI) every 4 months. Other compulsions included excessive hand washing; not directly touching door handles, light switches, or toilet seats. In addition, he was unable to touch another person without feeling infected. This latter compulsion was a great concern since he aspired to have a girlfriend and eventually a family. During history taking, James reported that his OCD would consume almost every moment of his day. A float back technique (Browning, 1999) was used to identify possible etiological events. It was discovered that his fears were probably initiated by comments made around the time of the initial advertising campaign associated with HIV and AIDS; he was about 13 or 14 years of age and was told to be careful about who and what he touched so as not to catch AIDS. Although this early event, which could be called the "presenting issue," would be considered the primary target in standard EMDR therapy, it was decided to administer the Adapted EMDR Phobia Protocol, and to target this event after all the triggers were processed.

An active avoidance list of feared stimuli was made of each aspect of his OCD, and this became the list of triggers to be targeted. Each trigger was treated as a single event. The first OCD stimulus to be processed was his fear of catching germs from touching door handles: the target image was "the millions of germs living in the dirt"; his emotion was fear, with a bodily sensation of being nauseous. After the disturbance

related to this event was reduced to 0, the next OCD stimulus to be processed was skin-to-skin contact: the target image was of him trying to kiss a woman he was attracted to; his emotion was an overwhelming fear of catching an illness if they touched, with a bodily sensation described as a rock in his throat.

After desensitization of all his current triggers (feared stimuli), James was able to establish a relationship with a young woman. Holding hands that would have been absolutely out of the question at the start of treatment was now easy for James. However, he was anxious about the idea of kissing and sexual intercourse, and the future template was conducted. Following this, the early warning about HIV/AIDs was processed, addressing his fears about being careful about whom and what he touched so as not to catch AIDS. On the 10th session, the positive cognition was developed and installed according to standard EMDR procedures. This cognition stated," I am safe."

After completing 10 EMDR sessions and installing the positive cognition, James reported he had been able to kiss his girlfriend and indeed had gone on to have sexual intercourse. Previous to EMDR, this would have been cause for a severe abreaction and the need for skin to be scrubbed clean; bedding burnt; and a trip for tests by both of them to ensure no infections had been shared. At follow-up, James reported that he was no longer using hand sanitizer and was now able to feel comfortable with physical contact within a relationship. James's Y-BOCS scores showed substantial decreases, from the extreme range to the mild range, with treatment effects maintained at follow-up (see Figure 1).

Case 2—Michael

Michael was a 24-year-old man, who was unable to maintain employment. He had worked in a number of different jobs and had been unemployed for the past 4 years. Michael's OCD revolved around obsessional thinking. He also had an ordering/sequencing compulsion; he had to have everything lined upon his desk and would align objects on other people's desks. Time was also a big issue for this client: Start and finish times had to be precise. It was decided to administer the Adapted EMDR Phobia Protocol.

During Phase 1 history taking, Michael reported that both his parents, with whom he still lived, had some OCD traits. His mother had a different day for every job in the house and would not deviate from her schedule. His father organized everything both at work and at home: "A place for everything and everything in its place." Michael identified a few past issues that could be worked on, but none appeared linked to his OCD. The floatback technique was used, but no precipitating incidents were recalled.

The EMDR Anxiety Protocol was used with Michael. Treatment started with desensitizing all the current OCD events causing distress. The first OCD event to be processed was his fear that if things such as papers or pens were not in exact order, he would be disowned by his family and unacceptable loneliness

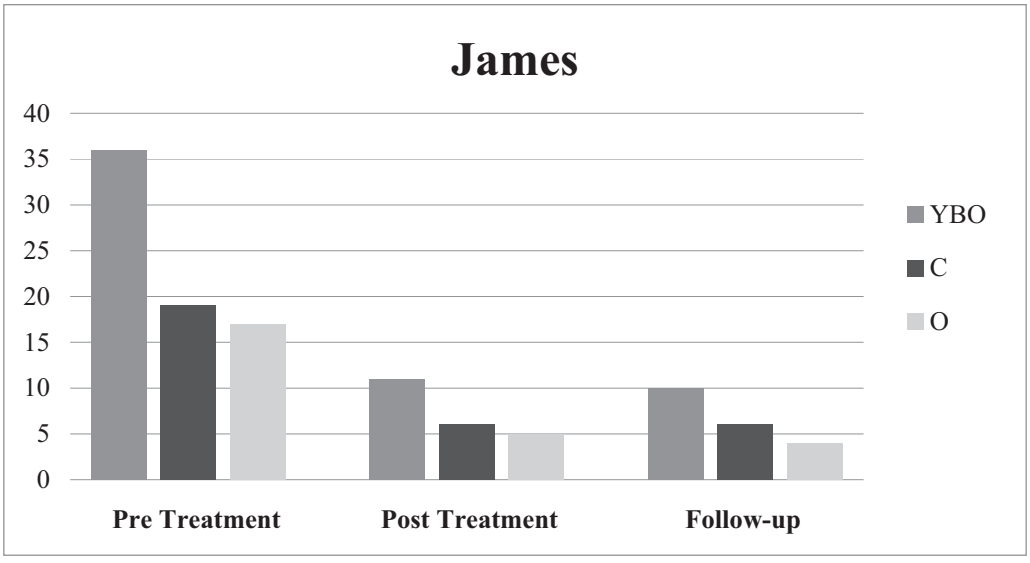

FIGURE 1. James's Y-BOCS scores.
Note. Y-BOC 5 total Y-BOCS score; C 5 Y-BOCS score on compulsions symptoms subscale; O 5 Y-BOCS score on obsessive symptoms subscale.

would follow. During the EMDR sessions, processing elicited a number of forgotten memories, providing insight into many aspects of his obsessional behavior patterns. As treatment progressed, it became obvious to the therapist, the client, and other people that his obsessional thinking patterns were also subsiding.

His core obsessional belief was the need to demonstrate to his father that he was good at something. This obsession was targeted only after all other OCD events were desensitized. Prior to this, it was observed that Michael had developed clarity of thinking and that the obsessions had lost their strength. Although the need to process this area seemed unnecessary at the time, the protocol was followed. Since this was the last event to be processed, the full standard procedure was applied. The image representing his obsession was his father's disappointment when his school report stated he could not concentrate on anything; the negative cognition and positive cognition were "I am useless" and "I am proud of me"; his emotion was "lost." Processing of this target elicited trails of memories around a need to remind his parents to do things, to think things through for people, and to be aware of his and their actions.

At follow-up, Michael reported he was now employed in a charity shop and that he was enjoying working in this disorganized workplace. He had been able to talk to his family who had been able to express how proud he was that he was now settling down. Michael's Y-BOCS scores showed substantial decreases, from the extreme range to the mild range, with treatment effects maintained and in the subclinical range at follow-up (see Figure 2).

Experiment 2

Method

Treatment. The therapist was the first author, and he is a qualified counselor with advanced training in CBT, and at the time of this study, had been trained in EMDR for over 2 years. Fourteen sessions were provided to each of the participants. History taking and preparation phases followed standard EMDR procedures as described previously in Experiment 1. They were completed in two sessions for Case 3, whereas Case 4 required four history taking sessions.

The participants received treatment according to the specialized EMDR protocol developed by the author: The Adapted EMDR Phobia Protocol with Video Playback. In this OCD protocol, targets are fully processed in the following sequence: starting with the current triggers (OCD compulsions and obsessions), followed by past related disturbing memories (if any), and then by the future template (imagining successful future action).

Assessment. The Y-BOCS was administered by the therapist at pretreatment and posttreatment. The follow-up administration was conducted by an independent psychologist at 4–6 months posttreatment. The participants' contact with the therapist had stopped at the end of treatment.

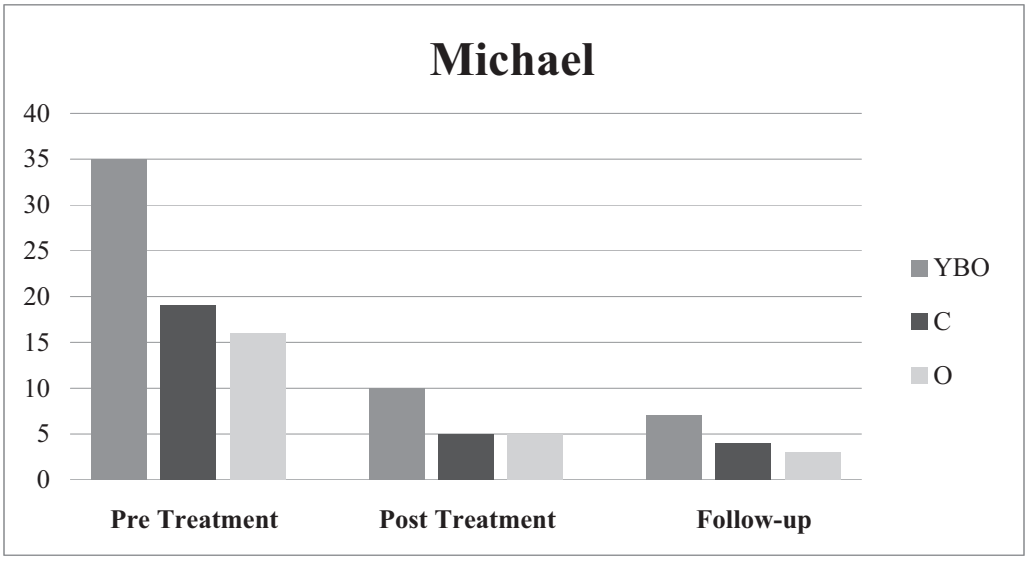

FIGURE 2. Michael's Y-BOCS scores.
Note. Y-BOC 5 total Y-BOCS score; C 5 Y-BOCS score on compulsions symptoms subscale; O 5 Y-BOCS score on obsessive symptoms subscale.

Participants. As described previously, two men with current OCD diagnoses were referred for treatment because they had not responded to previous CBT treatment of OCD. Robin was 19 years old; Alex was 26 years old. Note that client information has been altered to protect the participants' identities.

Case 3—Robin

Robin was a 19-year-old man, living with his mother. He had a complex history, which required an EMDR history taking assessment of four sessions. When Robin was 13 years old, there was a violent family breakup, which was followed by an exacerbation of preexisting OCD symptoms. His OCD became much more apparent and restrictive at that time and had continued without any benefit from prior attempts at CBT treatment.

Robin had a fear of shaking hands or touching bare flesh, and he constantly worried about electric plugs and running water. He unplugged all devices whenever he left a room and checked that all taps were turned off and not dripping. Sink and bathtub plugs were wound around the tap in a clockwise direction so that they could not fall and block the drain. All doors were locked and he checked this by counting the clicks of the key in the lock and checking the handle 20 times with each hand. If he was interrupted at any stage in his rituals he would have to restart the whole process. He estimated that it could take about 1.5 hours for him to be able to leave his home. He carried hand gel that he would use around 20 times a day.

The Adapted EMDR Phobia Protocol with Video Playback was provided. Robin chose to start work with his fear of shaking hands, which he saw as holding him back from gaining any future employment. The video playback technique was used to look at the first memory when Robin was afraid of shaking hands. He played the video in his mind, and when he became aware of feeling stress, he stopped. At that point, he identified the image, negative cognition, positive cognition, VOC, emotion, SUD, and body sensation. Standard procedures were used to process the memory. The video playback was used to monitor desensitization and to identify other incidents. Within three EMDR sessions, Robin was able to shake hands with certain people, with the subsequent use of hand gel. This then changed to shaking hands without the use of hand gel.

After addressing his fear of shaking hands, his obsession with electric sockets, water taps, and sink plugs was addressed in the same manner. He played a mental video in of his routine of checking everything, and when he felt some form of stress or anxiety, he signaled the therapist, who then followed standard EMDR procedures for processing the event. Once the stress or anxiety had subsided for that moment, he continued his video playback. Once again within three or four sessions, he reported significant improvement. He was now able to have a quick visual check and leave the house, without the need to physically plug and unplug electric sockets or turn on and off taps. His obsession about checking during door locking took more sessions but also resulted in substantial improvement. Rather than having to count the clicks of the key in the lock and checking the door handle 20 times with each hand, he was now able to simply lock the door and check the door handle twice with each hand.

Robin discovered a touchstone event during the processing of his OCD around the violent family breakup he had undergone. While Robin and his mother had been trying to flee the family home, they found their exit barred by a locked door. The target image that came to mind was his terrified expectation that his father would return home and confront them as they tried to leave. His negative cognition for this event was "I am to blame." His positive cognition was "I am free." The emotion that Robin attached to this memory was panic, with an SUD of 5; and he felt it in his bladder needing to urinate profusely. This was the final issue to be processed, and it was fully resolved with the standard protocol.

At follow-up, Robin reported he was no longer checking electric outlets or taps and sink plugs and that he no longer feels the need to use hand gel. He has found an interest in open water canoeing. Robin's Y-BOCS scores showed substantial decreases, from the extreme range to the subclinical range, with treatment effects maintained at follow-up (see Figure 3).

Case 4—Alex

Alex was a young man aged 26 years, living on his own, unemployed for most of his life since leaving school. He had recently separated from his partner and young child and was maintaining regular contact with the child and had limited contact with his partner. A full history was completed. Application of the float back technique revealed that the vast amount of his OCD began at age 13 years when he discovered that the man whom he had always known as his father was not his biological father.

Alex's OCD impacted many different aspects of his life, from cleanliness of his own body, spending an hour cleaning and bleaching a bathtub or shower

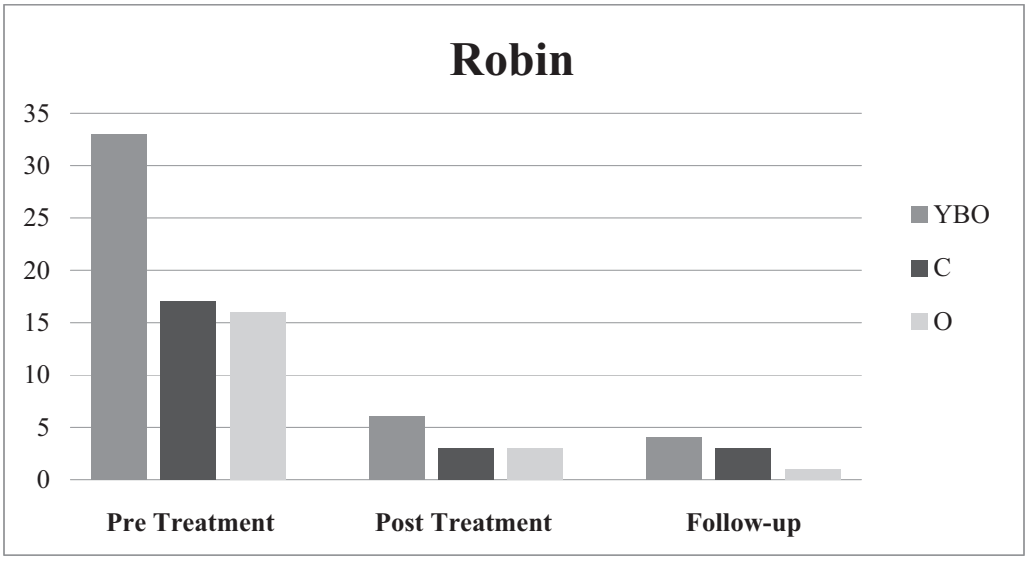

FIGURE 3. Robin's Y-BOCS scores.
Note. Y-BOC 5 total Y-BOCS score; C 5 Y-BOCS score on compulsions symptoms subscale; O 5 Y-BOCS score on obsessive symptoms subscale.

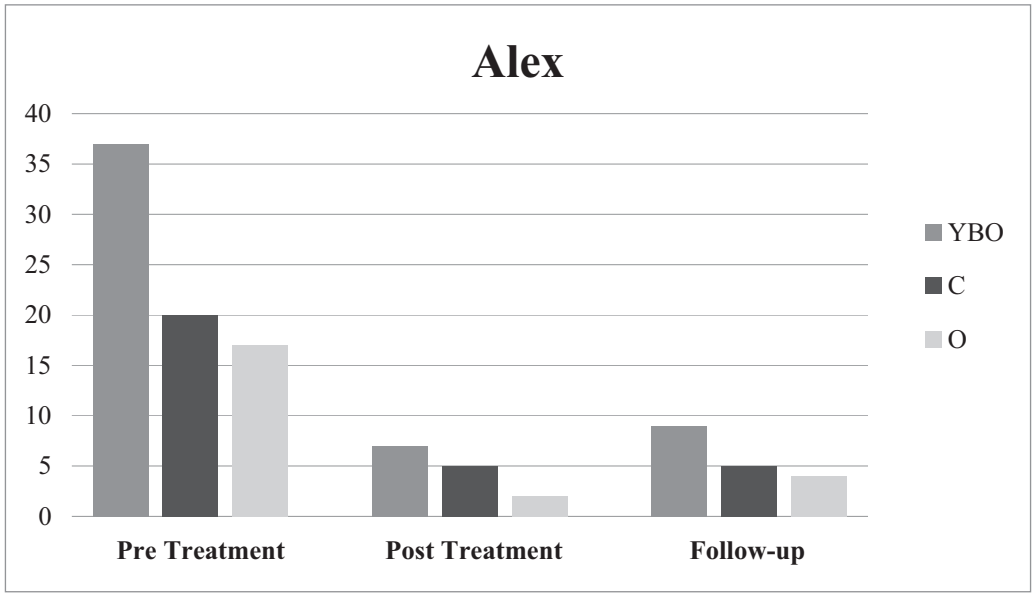

FIGURE 4. Alex's Y-BOCS scores.
Note. Y-BOC 5 total Y-BOCS score; C 5 Y-BOCS score on compulsions symptoms subscale; O 5 Y-BOCS score on obsessive symptoms subscale.

before he could use it, to having to clean and bleach the tub after he had used it. He carried his most prized personal possessions around with him and stored all his clothes and personal possessions in plastic storage boxes during the night. While he was obsessed with forming friendships and building a social life for himself, he was obsessed with not being able to trust people and measuring people against his high standards.

The Adapted EMDR Phobia Protocol with Video Playback began with processing OCD triggers. The first OCD event processed with EMDR was the compulsion to clean and bleach his bath tub or shower. Alex responded well, with the aid of the video playback technique, resulting in a dramatic reduction in the cleaning and bleaching behaviors. He no longer cleaned the bath/shower before use, unless it has been used by another, and his postbath/postshower

cleaning time was reduced from 60 minutes to 5 or 10 minutes.

The next target was his fear of losing his prized possessions and his compulsive behavior of carrying them around with him. Again the OCD protocol was used successfully. He began by leaving smaller items at home, and then larger items, such as TV and stereo, which he would previously have transported to his parents' home if he needed to leave his home.

The next target was his obsession with forming friendships and the trust issues. This was processed by playing a mental video playback of the last time he had met someone he felt could have been a friend. The image was about allowing this person into his home and then discovering he or she had stolen from him. The image was strong and vivid; the emotion attached was of loss, almost like that of bereavement, with a bodily sensation of emptiness in the pit of his stomach. Finally, treatment focused on his disturbing memories about his father.

This was followed by the future template installation in which Alex was able to successfully imagine satisfactory and rewarding employment and enjoyable social interactions with trustworthy friends. He then went on to picture himself having input and being involved with his son's life.

At follow-up, Alex reported that he was no longer carrying his possessions around with him and that he was able to talk to people without feeling that he had to repeat himself. His Y-BOCS scores showed substantial decreases, from the extreme range to the subclinical/mild range, with treatment effects maintained at follow-up (see Figure 4).

Discussion

What is striking about this study is the fact that all four participants described experiencing symptom improvement within the first two or three sessions. These individuals had suffered with disabling OCD for many years and had attempted various other CBT therapies without achieving any relief. After 14–16 adapted EMDR individual sessions, each participant reported significant symptom improvement and a large decrease in distress, with the effects of treatment maintained at 4–6 months follow-up. Each young man also made substantial changes in life function and activities, reaching and maintaining a number of important personal goals.

The percentage of symptom reduction reported in this study is comparable to that reported with EX/RP. Participants receiving the Adapted EMDR Phobia Protocol reported symptom reduction of 70.4% at posttreatment and 76.1% at follow-up. Participants receiving the Adapted EMDR Phobia Protocol with Video Playback reported symptom reduction of 81.4% at posttreatment and 81.4% at follow-up. However, unlike EX/RP, EMDR treatment does not require any homework and the confrontation of fears is manageable and not overwhelming.

Conceptualization of OCD and Its Treatment

Shapiro (2001) views current symptoms and disorders as the manifestation of unprocessed past traumatic events, and her standard EMDR procedures are developed on the assumption that processing these early events will eliminate the presenting symptoms. Unfortunately, for those working with complex issues such as OCD, this straightforward approach often seems insufficient. Some clients deny early events; for others, processing early events does not seem to change entrenched ritualized OCD behaviors. It is often difficult for therapists to discover a method of dealing with issues that seem to have little or no foundation in either trauma or logic.

Although OCD may have originated in early experiences, it appears to be a self-maintaining disorder. The author hypothesizes that OCD is best understood as a series of self-perpetuating and interlaced traumatic events, or as a complex multiple event. Each current trigger—each obsession and compulsion—is viewed as a separate recent "traumatic event," which links with other related events, and with past memories, to reinforce and perpetuate multidimensional disturbing patterns of thoughts and behaviors. OCD is not one continuous event, but instead it is a number of interlaced events that both support and reindoctrinate each other.

Consequently, it is recommended that treatment starts by addressing the current events. Therapeutic interventions that begin by addressing past incidents will almost always be undermined by the more recent OCD events. OCD treatment is most successful when it focuses on first reducing the power of present experiences. By dealing with individual triggers from the present, the underlying events often become apparent; they can even dissipate without being directly addressed. Related past incidents and touchstone events are revealed naturally during processing of the current triggers, and their meaning and relevance in the present life is apparent and diminished. The past distressing memories lose their strength and power and are more amenable to processing after the current OCD events are resolved.

The Adapted EMDR Phobia Protocols

Two different adaptations of the EMDR Phobia Protocol were used. In both protocols, the current triggers (OCD compulsions and obsessions) were the first targets addressed with EMDR processing.

In the first experiment, using the Adapted EMDR Phobia Protocol, the participants brought up an image of the current trigger and identified the most disturbing part as in standard EMDR protocol, but with no cognitions identified. Processing began with a focus on the image, emotion, and bodily sensation. When one current trigger was desensitized, the focus turned to the next current trigger, until all triggers were desensitized. The future template was then installed and then past memories were desensitized. After all desensitization was completed, the positive cognition was installed. In some respects, this procedure can be understood as treating all triggers, fears, and memories as one complex multiple event, with each aspect representing a part of the whole, and desensitizing that whole target before moving to cognitive installation. In this protocol, the cognitive work is left to the end because of the potential for the obsessive thoughts to disrupt the emotional and somatic processing.

It is expected that this adaptation might be most effective for those clients whose obsessions seem to be overpowering and where there is a concern that destabilization and loss of gains would occur by moving into the cognitive phases of EMDR before completing desensitization of all triggers. Using this protocol desensitizes the triggers, reducing anxiety, so that the client decreases his or her engagement in the obsessions and compulsions, making successful behavioral changes. This seems to reduce the power of the core obsessions (negative cognition), defusing its potency before the client is required to directly confront it. Research is needed to investigate these hypotheses.

In the second experiment, the mental video playback of the recent trigger provides a method for the client to experience the trigger, emotions, and bodily sensation within a safe and protected environment. In standard EMDR, the targeted event is reassessed numerous times throughout a session by asking the client to return to the incident and report what they notice. In this protocol, the client is asked to return to the video playback and to run the movie again and again, stopping whenever they notice any disturbance. Subsequent processing uses the standard EMDR procedures to continue desensitization and cognitive installation until the trigger is fully resolved when, during video playback, the client reported no distress and full endorsement of the positive cognition. This process is repeated with the next trigger. When all current triggers are fully processed, EMDR is used to process past memories and then to install the future template.

It is expected that the Adapted EMDR Phobia Protocol with Video Playback might be most effective for those clients whose OCD obsessions and compulsions are complex, involving multiple activities. It breaks the anxiety down into small manageable pieces, so that the client only has to focus on one small step at a time. The video playback allows for detailed desensitization of every aspect of the OCD event, eliminating fears and empowering the client. Research is needed to investigate these hypotheses.

The Treatment of Severe Anxiety

In a research study investigating EMDR in the treatment of panic disorder with agoraphobia (Goldstein et al., 2000), the response of participants was less than optimal. The researchers speculated that the poor response may have been caused by the participants' need for more extensive preparation because they may have had difficulty tolerating the intense affect that can be elicited during EMDR (Shapiro, 2001). It is possible that the single session provided for history taking and preparation in that study was insufficient for this purpose. In a recent single case study with a woman with panic disorder with agoraphobia, Fernandez and Faretta (2007) provided three history taking plus three preparation phases, which were followed by 12 processing sessions, resulting in remission of the diagnosis. They attributed her ability to engage in successful in-session processing to the in-depth preparatory work.

In this study, history taking was completed in two sessions for three participants, with the fourth participant requiring four sessions because of a complex history. Unlike Fernandez and Faretta (2007) who taught their client "self-control techniques" (p.51), no specific strategies were taught in this study for anxiety management. The preparation provided was the standard introduction to EMDR, using the safe/calm place procedure and a dry run with an insignificant target.

It is important to note that the participants' anxiety was managed in the adapted EMDR protocols developed by the author. These procedures titrate the anxiety, making it manageable and tolerable in session. Each fearful element of the participants' current triggers, obsessions, and compulsions, was broken down into small and manageable pieces and systematically targeted and desensitized through the

treatment process. This was a very tolerable process and did not elicit extreme anxiety. Instead the participants experienced rapid desensitization of the targets with subsequent relief and reprocessing of the related material. As a result of this effective procedure, the participants described the development of a sense of mastery, and changed their related behaviors with notable remission of symptoms.

Limitations of the Current Study

No definitive conclusions can be drawn from this preliminary research. Limitations of this study include the case study design. There is always the possibility of idiosyncratic responding based on individual personality, background, and life events. This is a preliminary study, and results may not generalize to other clients. However, the case study design allows for a careful examination of individual response and an examination of treatment process. It should be noted that these participants had long-standing OCD, which had not responded to prior CBT treatment; that improvement with the OCD protocols was apparent after only two or three sessions; and that the results were maintained at 4–6 months follow-up.

Two different adaptations of the EMDR Phobia Protocol were developed and tested in a case study design. The adaptations were based on the theoretical view that OCD is a self-perpetuating disorder, with OCD behaviors and current triggers reinforcing and maintaining the disorder. It is not possible to determine from this study if both approaches were equally effective, or if one approach was more suitable than the other for a specific type of presentation. Future research is needed to investigate these questions.

Standard EMDR procedures and protocols were modified to accommodate this view of OCD. Treatment began by addressing the current obsessions and compulsions, instead of working on past issues, even though the latter approach is standard EMDR procedure. Various other modifications to the standard procedures were made, including delaying the cognitive installation and the use of the mental video playback.

Another limitation of this study is that the first author was the therapist, who also conducted the Y-BOCS assessments at pretreatment and at posttreatment. However, the participants all came into treatment with a diagnosis of OCD from an independent referring professional, who further reported that the participants' OCD symptoms had not remitted with prior treatment. The follow-up assessments were conducted by independent assessors.

Future Research

Future research is needed to investigate the effectiveness of the two adaptations introduced in this study: the Adapted EMDR Phobia Protocol and the Adapted EMDR Phobia Protocol with Video Playback. It is hoped that this research can illuminate and clarify the most effective EMDR approach to assist clients with disorders, such as OCD, where function is impaired by the self-perpetuating pattern of obsessive thoughts and compulsive behaviors.

It is possible that these protocols might be suitable for other disorders, where the link to prior trauma is tangential and not particularly relevant and where the current symptom manifestation takes on a life of its own, becoming self-reinforcing and self-perpetuating. Some examples of this may be social phobia and panic disorder with agoraphobia, where the client's avoidance of fearful situations reinforces the anxiety. The protocols might be helpful with other disorders that are considered to be on the OCD spectrum, such as body dysmorphic disorder. It is also possible that depressive symptoms such as rumination and behavioral withdrawal may respond to these protocols. It is recommended that research be done to investigate these possibilities.

References

Allemagne, K. L. (2009, August). The use of EMDR with treatment resistant patients suffering from chronic obsessive-compulsive disorder. Poster presented at the annual meeting of the EMDR International Association, Atlanta, GA.

American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: Author.

Atmaca, M., Onalan, E., Yildirim, H., Yuce, H., Koc, M., Korkmaz, S., et al. (2011). Serotonin transporter gene polymorphism implicates reduced orbito-frontal cortex in obsessive-compulsive disorder. Journal of Anxiety Disorders, 25(5), 680–685.

Bae, H., Kim, D., & Ahn, J. (2006). A case series of post-traumatic obsessive-compulsive disorder: A six month follow-up evaluation. Journal of the Korean Neuropsychiatric Association, 45(5), 476–480.

Bisson, J., & Andrew, M. (2007/2009). Psychological treatment of post-traumatic stress disorder (PTSD). Cochrane Database of Systematic Reviews, 3, CD003388. http://dx.doi.org/10.1002/14651858.CD003388.pub3

Böhm, K., & Voderholzer, U. (2010). Use of EMDR in the treatment of obsessive-compulsive disorders: A case series [Einsatz von EMDR in der behandlung von zwangsstörungen: Eine fallserie]. Verhaltenstherapie, 20, 175–181. Retrieved October 1, 2011, from http://content.karger.com/

ProdukteDB/miscArchiv/000/319/439/000319439_sm_eversion.pdf
Bradley, R., Greene, J., Russ, E., Dutra, L., & Westen, D. (2005). A multidimensional meta-analysis of psychotherapy for PTSD. The American Journal of Psychiatry, 162(2), 214–227.
Brady, P. (2003, November). Genetics may help explain OCD. Retrieved September 16, 2008, from Yale Daily News Website: http://www.yaledailynews.com/news/2003/nov/04/genetics-may-help-explain-ocd/
Browning, C. J. (1999). Float back and float forward: Techniques for linking past, present and future. EMDRIA Newsletter, 4(3), 12, 34.
Deacon, B. J., & Abramowitz, J. S. (2004). Cognitive and behavioral treatments for anxiety disorders: A review of meta-analytic findings. Journal of Clinical Psychology, 60(4), 429–441.
de Jongh, A., Holmshaw, M., Carswell, W., & van Wijk, A. (2010). Usefulness of a trauma-focused treatment approach for travel phobia. Clinical Psychology and Psychotherapy. http://dx.doi.org/10.1002/cpp.680
de Jongh, A., & ten Broeke, E. (2009). EMDR and the anxiety disorders: Exploring the current status. Journal of EMDR Practice and Research, 3(3), 133–140.
de Jongh, A., van den Oord, H. J., & ten Broeke, E. (2002). Efficacy of eye movement desensitization and reprocessing in the treatment of specific phobias: Four single-case studies on dental phobia. Journal of Clinical Psychology, 58(12), 1489–1503.
de Silva, P., & Marks, M. (1999). The role of traumatic experiences in the genesis of obsessive-compulsive disorder. Behaviour Research and Therapy, 37(10), 941–951.
Fernandez, I., & Faretta, E. (2007). Eye movement desensitization and reprocessing in the treatment of panic disorder with agoraphobia. Clinical Case Studies, 6(1), 44–63.
Feske, U., & Goldstein, A. J. (1997). Eye movement desensitization and reprocessing treatment for panic disorder: A controlled outcome and partial dismantling study. Journal of Consulting and Clinical Psychology, 65(6), 1026–1035.
Fisher, P. L., & Wells, A. (2005). How effective are cognitive and behavioral treatments for obsessive-compulsive disorder? A clinical significance analysis. Behaviour Research and Therapy, 43(12), 1543–1558.
Foa, E. B., & Kozak, M. J. (1997). Mastery of obsessive-compulsive disorder: A cognitive-behavioral approach therapist guide. New York: Oxford University Press.
Franklin, M. E., & Foa, E. B. (2011). Treatment of obsessive compulsive disorder. Annual Review of Clinical Psychology, 7, 229–243.
Goldstein, A. J., de Beurs, E., Chambless, D. L., & Wilson, K. A. (2000). EMDR for panic disorder with agoraphobia: Comparison with waiting list and credible attention-placebo control conditions. Journal of Consulting and Clinical Psychology, 68(6), 947–956.
Goldstein, A. J., & Feske, U. (1994). Eye movement desensitization and reprocessing for panic disorder: A case series. Journal of Anxiety Disorders, 8, 351–362.
Goodman, W. K., Price, L. H., Rasmussen, S. A., Mazure, C., Fleischmann, R. L., Hill, C. L., et al. (1989). The Yale–Brown Obsessive Compulsive Scale. I. Development, use, and reliability. Archives of General Psychiatry, 46(11), 1006–1011.
Heyman, I., Mataix-Cols, D., & Fineberg, N. A. (2006). Obsessive-compulsive disorder. British Medical Journal, 333(7565), 424–429.
Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Archives of General Psychiatry, 62(6), 593–602.
Khouzam, H. R., Emes, R., Gill, T., & Raroque, R. (2003). The antidepressant sertraline: A review of its uses in a range of psychiatric and medical conditions. Comprehensive Therapy, 29(1), 47–53.
Kleiner, L., & Marshall, W. L. (1987). The role of interpersonal problems in the development of agoraphobia with panic attacks. Journal of Anxiety Disorders, 1(4), 313–323.
Luber, M. (2009a). Current anxiety and behavior. Scripted by Marilyn Luber (Francine Shapiro, 2001, 2006). In M. Luber (Ed.), EMDR scripted protocols: Basic and special situations (pp. 133–141). New York: Springer Publishing.
Luber, M. (2009b). Phobia protocol. Scripted by Marilyn Luber (Francine Shapiro, 2001, 2006). In M. Luber (Ed.), EMDR scripted protocols: Basic and special situations (pp. 155–173). New York: Springer Publishing.
Maher, M. J., Huppert, J. D., Chen, H., Duan, N., Foa, E. B., Liebowitz, M. R., et al. (2010). Moderators and predictors of response to cognitive-behavioral therapy augmentation of pharmacotherapy in obsessive-compulsive disorder. Psychological Medicine, 40(12), 2013–2023.
Maxfield, L., & Melnyk, W. T. (2000). Single session treatment of test anxiety with eye movement desensitization and reprocessing (EMDR). International Journal of Stress Management, 7(2), 87–101.
McNally, R. J., & Lukach, B. M. (1992). Are panic attacks traumatic stressors? The American Journal of Psychiatry, 149(6), 824–826.
Meyer, V. (1966). Modification of expectations in cases with obsessional rituals. Behaviour Research and Therapy, 4(4), 273–280.
National Collaborating Centre for Mental Health. (2005). Post-traumatic stress disorder (PTSD): The management of PTSD in adults and children in primary and secondary care. London: National Institute for Clinical Excellence.
National Collaborating Centre for Mental Health. (2006). Obsessive-compulsive disorder: Core interventions in the treatment of obsessive-compulsive disorder and body dysmorphic disorder: National clinical practice guideline number 31. Leicester, United Kingdom: British Psychological Society & the Royal College of Psychiatrists.

Nauert, R. (2006). Genetic link for OCD discovered. Retrieved September 16, 2008, from Psych Central Web site: http://psychcentral.com/news/2006/07/27/genetic-link-for-ocd-discovered/

Parnell, L. (2007). A therapist's guide to EMDR: Tools and techniques for successful treatment. New York: Norton.

Rosa-Alcázar, A. I., Sánchez-Meca, J., Gómez-Conesa, A., & Marín-Martínez, F. (2008). Psychological treatment of obsessive-compulsive disorder: A meta-analysis. Clinical Psychology Review, 28(8), 1310–1325.

Shapiro, F. (1995). Eye movement desensitisation and reprocessing: Basic principles, protocols, and procedures. New York: Guilford Press.

Shapiro, F. (2001). Eye movement desensitisation and reprocessing: Basic principles, protocols, and procedures (2nd ed.). New York: Guilford Press.

Steketee, G. (1996). Treatment of obsessive-compulsive disorder. New York: Guilford Press.

Steketee, G., & White, K. (1990). When once is not enough: Help for obsessive compulsives. Oakland, CA: New Harbinger Press.

Tolin, D. F., Abramowitz, J. S., & Diefenbach, G. J. (2005). Defining response in clinical trials for obsessive-compulsive disorder: A signal detection analysis of the Yale-Brown obsessive compulsive scale. The Journal of Clinical Psychiatry, 66(12), 1549–1557.

U.S. Department of Health and Human Services. (2011). SAMHSA's national registry of evidence-based programs and practices. Washington DC: Substance Abuse and Mental Health Services Administration. Retrieved October 1, 2011, from http://nrepp.samhsa.gov/ViewIntervention.aspx?id=199

World Health Organization. (2011). Global burden of obsessive-compulsive disorder in the year 2000. Retrieved June 16, 2011, from http://www.who.int/healthinfo/statistics/bod_obsessivecompulsive.pdf

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