J. Behav. Ther. & Exp. Psychiat. 49 (2015) 230–236

Contents lists available at ScienceDirect

Journal of Behavior Therapy and Experimental Psychiatry

journal homepage: www.elsevier.com/locate/jbtep

Imagery Rescripting for Obsessive Compulsive Disorder: A single case experimental design in 12 cases

David Veale [a, b, *], Nicholas Page [a, b], Elizabeth Woodward [a, b], Paul Salkovskis [c]

[a] The Institute of Psychiatry, Psychology and Neurosciences, King's College London, UK
[b] The South London and Maudsley NHS Foundation Trust, SE5 8AF, UK
[c] Department of Psychology, University of Bath, Claverton Down, Bath, BA2 7AY, UK

ARTICLE INFO

Article history:
Received 27 November 2014
Received in revised form
22 February 2015
Accepted 2 March 2015
Available online 11 March 2015

Keywords:
Obsessive Compulsive Disorder
Imagery
Imagery Rescripting
Traumatic memories
Anxiety

ABSTRACT

Background and objectives: Some individuals with Obsessive Compulsive Disorder (OCD) may experience recurrent intrusive distressing images, which may be emotionally linked to past aversive memories. Our aim was to investigate whether Imagery Rescripting was an effective intervention for such individuals with OCD.
Method: Twelve cases who experienced intrusive distressing images are presented in a $A_1BA_2CA_3$ single case experimental design. After a baseline of symptom monitoring (A_1), participants had a control intervention of talking about the memory related image (B), followed by symptom monitoring (A_2), a single session of Imagery Rescripting (C) and further monitoring for up to 3 months (A_3).
Results: Minimal change was seen following the control intervention. However, at 3 months following ImRs, there was a drop in the Yale-Brown Obsessive Compulsive Scale, with a decrease from a mean of 24.1 to 10.7. Reliable improvement was achieved in 9 out of the 12 cases and clinically significant change in 7 out of 12 at 3-month follow up. The limitations are that all cases were selected on the basis that they had an aversive memory linked to their imagery.
Conclusions: Imagery Rescripting is a promising therapeutic technique for OCD as an adjunct to CBT where intrusive images are linked to aversive memories.

1. Introduction

Cognitive Behavioral Therapy (CBT), including exposure and response prevention, remains the psychological treatment of choice for Obsessive-Compulsive Disorder (OCD) (National Institute for Health and Care Excellence, 2005). However, a significant proportion of cases still fail to respond to CBT (Abramowitz, Franklin, Schwartz, & Furr, 2003; Rufer, Fricke, Moritz, Kloss, & Hand, 2006; Tolin, Maltby, Diefenbach, Hannan, & Worhunsky, 2004). This has prompted the search for new target areas for intervention, in the hope that outcomes can be improved.

Imagery has long been discussed within cognitive models of anxiety disorders including OCD (De Silva, 1986; Hackmann, Surawy, & Clark, 1998), however it is particularly prominent in post-traumatic stress disorder (PTSD) (Bisson et al. 2007; Ehlers & Clark, 2000). Intrusive images related to the trauma are considered to play an important role in the maintenance of the disorder (Hirsch & Holmes, 2007). Intrusive imagery linked to an aversive (or traumatic) memory is experienced in a variety of other anxiety disorders, including social phobia (Hackmann, Clark, & McManus, 2000), body dysmorphic disorder (Osman, Cooper, Hackmann, & Veale, 2004), agoraphobia (Day, Holmes & Hackmann, 2004), specific phobia of vomiting (Price, Veale, & Brewin, 2012), health anxiety (Muse, McManus, Hackmann, Williams, & Williams, 2010) and in OCD (Coughtrey, Shafran, & Rachman, 2013; Lipton, Brewin, Linke, & Halperin, 2010; Speckens, Hackmann, Ehlers & Cuthbert, 2007). Speckens et al. (2007) found that 81% (29/37) of participants with severe OCD reported intrusive mental imagery and for 76% of these, the images was associated with subsequent engagement in compulsive behaviors. They also found that participants' OCD symptoms reportedly developed following an aversive event, something which has been noted before in some types of OCD (Coles, Pietrefesa, Schofield, & Cook, 2008; De Silva & Marks, 1999; Lipinski & Pope, 1994). For these participants, the intrusive images held an important association, often linked to beliefs they held

* Corresponding author. Centre for Anxiety Disorders and Trauma, The Maudsley Hospital, 99 Denmark Hill, London, SE5 8AZ, UK.
E-mail address: David.Veale@kcl.ac.uk (D. Veale).

http://dx.doi.org/10.1016/j.jbtep.2015.03.003
0005-7916/

about themselves or their responsibilities. Those who experienced images indicated that they were associated with memories of adverse events, which might have not been emotionally processed. If this is so, then finding ways of enhancing reprocessing of these images could be of therapeutic value.

Imagery Rescripting (ImRs) targets aversive traumatic memories and has been investigated across a range of disorders in which intrusive images are present. Wild, Hackmann, and Clark (2007) found that when ImRs was used to update the meanings of aversive memories in participants with social phobia, a resulting change was seen in their maladaptive beliefs, and in the associated intrusive images thought to play a role in maintaining the disorder. A reduction in the overall severity of the participant's social phobia was also found. Nilsson, Lundh, and Viborg (2012) also found similar changes for ImRs in social phobia without the need for cognitive restructuring. ImRs has also shown promising results as an intervention for depression (Brewin et al., 2009), and as an adjunct to treatment of personality disorders (Weeterman & Arntz, 2007) and within schema therapy (Arntz & Van Genderen, 2009). Arntz (2012) provides a comprehensive summary of the use of ImRs across disorders as well as suggesting a research agenda for developing the work within the field both in terms of clinical application and in investigating the underlying mechanisms of change. He highlights the need to investigate ImRs as a stand-alone intervention even if it is not intended for use in isolation from other treatments. Furthermore, he emphasizes the need to allow for adequate follow-up data without further intervention, to establish the possible long-term effects of ImRs in isolation. This study aims to follow that model and investigate the efficacy of ImRs as a standalone intervention for OCD, where intrusive images linked to aversive memories are also present. The current study also builds on previous case series in other disorders by incorporating a control intervention and randomization to the start of the control intervention. It was hypothesized that addressing aversive memories using ImRs would lead to a reduction in OCD symptoms, measured here by on the Yale-Brown Obsessive Compulsive Scale (Goodman et al., 1989).

2. Method

The study employed an $A_1BA_2CA_3$ single case experimental design with randomization to the start of the B phase. In this design, A_1 refers to the initial baseline, B refers to the control intervention, A_2 to a period of symptom monitoring after the control intervention, C to the intervention being investigated (a session of Imagery Rescripting of the aversive memory), and A_3 to a further period of symptom monitoring.

2.1. Participants

A sample of 13 participants seeking treatment for OCD were recruited, all of whom reported experiencing intrusive imagery. One participant was excluded following the initial assessment, and no longer fitted the inclusion criteria, as their YBOCS dropped from 25 at initial assessment to 3 at the study assessment. The symptoms consisted of intrusive sensations (not a visual image) and feeling out of control, which was interpreted as doubts about whether she was going mad or dementing. She was mentally checking the passing of time, seeking frequent reassurance from her husband and ruminating on why she felt the way she did. She had intrusive urges to act uncontrollably such as to take of all her clothes and kept questioning why she made certain actions in a particular order. Three years ago she had a relatively acute onset of OCD about 4 months after a traumatic birth of her child and subsequent death of her father. After the birth she had a severe hemorrhage when she thought she was going to die and felt that the care was negligent. She had one trial of standard CBT that focused on maintenance factors and was taking a non-SSRI anti-depressant for depressive symptoms. At the initial assessment, the clinician had make an emotional link between the intrusive sensations of being out of control being the same as what she had experienced post-natally. The initial assessment had included a rationale for referral to the study and the way that her memory of the childbirth was possibly linked to her current symptoms and that the memory had lost its context. At the assessment for the study, she said she now had an understanding of the emotional link between her OCD and her experience at childbirth and her YBOCS score had markedly decreased.

The final sample therefore consisted of 12 participants. All but one participant reported having received at least one prior course of CBT (Table 1). However no previous trials had occurred in the previous 12 months and no formal assessment was made of the quality of CBT that had been delivered.

2.2. Inclusion criteria

(1) Main diagnosis of OCD as assessed by the Structured Clinical Interview for DSM-IV Disorders (SCID) (First, Spitzer, Gibbon, & Williams, 1995).
(2) Experienced intrusive imagery as part of their OCD, which was considered by the participant and assessor to be emotionally linked to memories of past aversive events.
(3) No psychopharmacological treatment or on a stable dose for 8 weeks prior to the study and no plans to alter the dose throughout the measurement period

2.3. Exclusion criteria

(1) Major co-morbid disorder of psychosis or borderline personality disorder or alcohol or substance misuse or dependence.
(2) Concurrent additional psychotherapy.

2.4. Measures

Participants were identified as having intrusive images and aversive memories through use of a semi-structured interview used by Speckens et al., (2007). This asks about the characteristics of any images or “felt impressions”, the context in which they occur, the emotion and degree of distress aroused, the meaning attached to them, and any associated memories.

Standardized rating scales were also used on a weekly basis to measure mood and specific symptoms related to the disorder. These were:

(a) Yale-Brown Obsessive-Compulsive scale (Y-BOCS) (Goodman et al., 1989). The Y-BOCS is a 10-item clinician-rated scale used to measure the severity of obsessive-compulsive symptoms and response to treatment. Each item is scored from 0 (no symptoms) to 4 (extreme symptoms), giving the total score with a range from 0 to 40. Higher scores indicate greater symptomatology of OCD. The scale has high internal consistency ($\alpha = 0.91$).
(b) Obsessive Compulsive Inventory (OCI) (Foa, Kozak, Salkovskis, Coles, & Amir, 1998). The OCI is a 42-item self-report scale for OCD symptoms. The current study used the distress-only version of the OCI, for which items are rated on a 5-point Likert scale ranging from 0 (not at all) to 4 (extremely). The scale measures distress relating to 7 different subscale constructs; washing, checking, doubting,