Cognitive-behavioural therapy and recovery of a delusional dysmophophobia case

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Abstract

Background: We present the application of cognitive-behavioural therapy in a clinical case diagnosed with delusional dysmophophobia.

Method: The psychometric scales used for evaluation were the Positive and Negative Syndrome Scale for Schizophrenia, Beck Anxiety and Depression inventories, the Rosenberg Self-Esteem Scale along with the degree of conviction in the delusional belief and in alternative explanations, and social functioning measured by patient reporting. The therapy included cognitive and behavioural techniques: evidence analysis, search for alternative explanations, logical and functional analysis, reality testing, progressive relaxation techniques, in vivo and imaginal exposure therapy. Evaluations were performed before and after the treatment and then at follow-up after 12 and 24 months.

Results: Progressively, the delusional conviction disappeared. There were significant improvements at an emotional level and the patient recovered social and work functioning.

Conclusions: The need to use psychological treatments for people with delusional disorder as first choice treatment must be considered.

Keywords: Psychosis, cognitive-behavioural therapy, delusional disorder, body dysmorphic disorder, recovery.

Currently, the Diagnostic and statistical manual of mental disorders —text revision— 5th edition (DSM-V) American Psychiatric Association [APA], 2013), conceptualizes the delusional disorder, somatic type, as a psychotic disorder.

There are studies and updated revisions about the application of psychotherapy in non-delusional dysmorphophobia (Ipser, Sander, & Stein, 2009; Wilhelm, Buhlmann, Hayward, Greenberg, & Dimaite, 2010). However, there is a lack of literature when it comes to a disorder with delusional aspects, where the accepted approach tends to be based on empirical validated treatments for psychosis. In that respect, it is noteworthy that psychological treatments in general and cognitive-behavioural therapy in particular, are recommended in the main Clinical Practice Guides (CPG) to treat people diagnosed with schizophrenia; for patients with a first episode of psychosis, combined with an antipsychotic drug; and people with high risk of developing psychotic disorders who might receive psychological treatment instead of antipsychotic drugs (National Clinical Practice Guideline, NICE, 2014).

Some of the most effective therapeutic components of cognitive-behavioural therapy (CBT) in psychotic symptoms are the modification of beliefs, enhancement of coping strategies, exposure techniques and skills training. These components are used to relieve suffering associated with symptoms and improve personal and social functioning and to understand the psychotic experiences in the patient’s biographical context. In addition to the use of these techniques it is worth highlighting the importance of dealing with the psychotic symptomatology using a recovery approach. This approach must allow a person with a mental health diagnosis to build a meaningful life beyond the development of the symptoms, so that the person notices and takes control over the different aspects of his/her life.

In the remainder of this article, we aim to respond to the following question: can CBT help a patient with delusional dysmorphobia?. In the following sections, we present the implementation of CBT to therapeutic work with a patient with dysmorphic experiences of delusional nature.
Method

Participant

Sara was a 40-year-old woman, who had been diagnosed with delusional dysmorphic disorder. She was referred to our Mental Health Rehabilitation Service in August 2009 from the Mental Healthcare Clinic where she had received the diagnosis from a psychiatrist and had been treated for over a year with pharmacological interventions (atypical antipsychotics, benzodiazepine anxiolytics and selective serotonin reuptake inhibitors), without experiencing any significant improvements. We were asked to offer psychological intervention for the delusional ideation and overall social. She had not previously engaged in any psychological intervention. Seven months before the referral the patient had been admitted to an inpatient unit due to risk of self-harm.

During the initial assessment interview, Sara showed intense emotional suffering due to her belief that she had a deformed body, mainly her buttocks and groin. This belief began in May 2008, apparently as a result of an oedema as part of the treatment for iron-deficiency anaemia. She was motivated to work towards recovery due to feeling sad and anxious and that her life had been paralyzed. She showed an absolute degree of conviction in terms of her deformed perception, although she was receptive to psychotherapeutic work with her (psychotic) experiences.

Before the onset of the disorder, she considered herself to be a “happy, positive, slightly restless, active” person. She lived independently. She had a diploma in social work and a long work history of over ten years in a telehomecare company offering support to elderly people through home visits.

Case formulation

Throughout her life, her physical appearance had been very important to Sara and had helped bolster her self-esteem. Her perception of herself as having a “good body” helped her function in her social and work relationships.

Sara’s social functioning was good, she had an unremarkable life, and was able to function well both at work and socially with friends and her partner. Two months before the onset of her beliefs about her body starting, Sara suffered a relationship break up which impacted on her mood (“I had depression and was on sick leave for one month”). This had happened previously, 2006 and 2007. Sara had attributed the break up of the relationship internally, namely to her “imperfect body”. Her beauty was brought into question; which explained the development of depressive episodes with the consequent diminished self-esteem, sad mood, her social withdrawal (including sick leave from work) and decline in her social functioning.

In this context of vulnerability, she experienced severe emotional distress (anguish, anxiety, depression) as a reaction to her perception of having a deformed body (especially in the gluteal and groin area). Sara attributed it to the medication she was prescribed because of anaemia (“it has produced an oedema and left me deformed”).

The concern because of this perception of a body alteration brought important changes to the patient’s life: temporal incapacity to work, limitations in personal functioning, returning to the family home with her mother, social isolation; a monotonous and less active life, limiting activity to walks with her mother and only having social contact with her two brothers with whom she had a good relationship. In June 2008, the patient went to an aesthetic

Figure 1. Case formulation
surgery center to get surgical treatment, but the family stopped this process. So Sara had adopted depressive behaviour that helped to maintain the anxious-depressive symptomatology, affecting self-esteem and maintaining the psychotic symptomatology (perceptual alteration and delusional conviction). See Figure 1.

**Instruments**

Subjective methods: degree of conviction in the delusional belief and other dysfunctional beliefs (in relative terms, 0% is an indicator of no conviction and 100% of absolute conviction).

The Positive and Negative Syndrome Scale (PANSS; Kay, Opler, & Lindenmayer, 1988; Peralta & Cuesta, 1994). This is a semi-structured interview to measure the presence and severity of psychotic symptoms. In this study, only the subscales for the expression and validation of the patient's emotions, and direct confrontation of delusional ideas and beliefs, favouring alteration, as she perceived that her buttocks had disappeared and there were bulges in her groin. As an alternative explanation, although initially she didn't believe it, she accepted the theoretical possibility: "it is all in my mind." It was a different point of view of what was happening. Initially, the degree of conviction in the delusional belief was of 100% and in the alternative explanation 0%. Our aim was to change, at some point, those percentages of conviction. To do so, we analyzed evidence for and against the delusional belief (for example, no one had said a word about a physical change in her body and no one had rejected her). During the therapeutic process we also carried out a logical analysis of the discrepancies between the patient's judgment and other people's judgment about the deformity conviction. For example:

Therapist (T): When you go out for a walk, do people look at you? Do they turn around or comment on your appearance?…

Patient (P): No… (T): Has any acquaintance, friend or relative ever commented on a change in your appearance or a deformity in your body? (P): No, they have never commented on that… (T): How do you explain that, after the physical change you experienced, nobody, even your family and closest friends, said anything to you about it?… (P): I don't know, the truth is that they have never said anything to me, even my family. On the contrary, my family says I am the same as before. They don't notice any change. (T): How could we explain that you perceive your body as deformed but people don’t see that?… (P): I don't know, I suppose that would mean it is in my mind. But I see myself as deformed, the reality is that I see myself as deformed.

**Exchange of roles**

Another resource that we used was the exchange of roles between the patient and the therapist. This technique helps patients to see an alternative point of view and can soften their beliefs while the therapist takes the patient role. Below is one example
of the application of this technique focusing on Sara not resuming her activities in a gym.

(T): I have a deformed bottom, flabby… I want to change it, what would you recommend?. (P): Go to the gym and do some exercise. (T): To the gym?... No, I don’t want to people to see me. (P): But you find all kind of people in a gym: slim, plump… (T): I know, but I am deformed and someone might say something to me, I would be the focus of attention. (P): Nowadays people do their own thing, they don’t look at you…

The exercise offered a different perspective and helped the patient to question her belief that she had to have a “normal” body to go out and have a normal life.

Inference chaining

This technique identifies and focuses on the psychological meaning associated with the patient’s beliefs. Beliefs are not discussed. They are considered as real and we explore the consequences that the patient fears. Questions like the following are used: what would happen, how would that be interpreted, what would that imply or mean (to the patient), what consequences would have if such ideas/interpretations were real?. These questions are used in response to the patient’s answers so that inferences are being chained. This procedure is continued until one nuclear dysfunctional belief (or a feared scene) is identified, which will then be the focus of the cognitive and/or behavioural treatment.

By using this technique we identified the dysfunctional belief: “I have to be liked by people”, a very demanding and unrealistic belief. This belief was a barrier for Sara to have a more active social life, as she has to be liked and she had a “deformed” body. Below we present an extract of the cognitive restructuring work that we used with this belief. The aim was to increase awareness of the demand that she imposed on herself and then to help her restore her social activity and look at other attractive aspects in people, other than physical appearance:

(T): You say you have to be liked by people, what would you need for that? (P): Being physically ok… (T): What does it mean to be physically ok? (P): Being beautiful, having a good body… perfect. (T): Ok, then, if I am beautiful and have a good body, will I be liked by everybody?... and what happens if I am intelligent or if I am beautiful but very boring… will I be liked by everybody? (P): Well you would have to be funny and nice… (T): Ok, if I am beautiful, with a good body… funny, nice, but bad tempered and unpleasant? (P): You would also have to be a non aggressive person. (T): And if I had all those characteristics… could I have other characteristics that some people don’t like? What do you think? (P): Yes. (T): It seems difficult to be liked by everybody. (P): Yes, it is impossible.

Elegant solution

In general, patients think that to restore their lives, symptoms have to disappear, but in many cases, despite the different treatments, symptomatology is persistent. In this case it is recommended to deal with this belief. A useful resource is the elegant solution technique (for example, Ellis, 1996). The following question is asked to the patient: “why, even if the circumstances are so negative (as he/she perceives them), is it not possible to get satisfaction from other aspects of life or work or work towards others goals in your life?”. It is assumed that his/her circumstances/symptoms are negative, but if change is not achieved, he/she can choose to adapt to them and continue with his/her life. This alternative is useful for patients that initially “require” the absence of suffering before starting to function.

Imaginal exposure

Just the possibility of being exposed to others with her “deformed body” caused her a lot of anxiety and reinforced her isolation. We applied an imaginal exposure technique, facing her dreads and fears with the aim of reducing the intensity of her anxiety. Furthermore, decreasing her level of anxiety would help to establish the cognitive restructure which was done simultaneously. Afterwards it would also help to design in vivo exposures as reality testing in social situations.

The therapist helped the patient to describe her feared scenario. The instruction was to close her eyes and visualize the scenario carefully as realistically and vividly as possible; her friends saw her deformed body and they said “but what happened to you!… your buttocks are all flat and deformed!… you look bad… you have also bulges in your legs!… you look very bad…”.

The patient was supported to minimize possible neutralization and distraction strategies. The exposure generated feelings of distress, embarrassment, discomfort and fear. We increased progressively the length of the imagined scene. After each test, the patient had to evaluate the level of discomfort she experienced in a scale from 0 to 100 subjective anxiety units.

Reality testing techniques

In order to develop arguments based on evidence, we introduced reality testing/exposure techniques. The patient based her idea of deformity on the argument of seeing her body as deformed. We suggested using another sensorial modality, the sense of touch. We showed her a plastic bottle and proposed the following exercise:

(T): Are the grooves of the bottle bigger or smaller than the bulges of your thighs? (P): Smaller. (T): Close your eyes and touch the bottle, touch the grooves. (P): (She does it). (T): Do you feel the grooves? (P): Yes. (T): If you touch your deformity you should feel something similar, shouldn’t you? (P): Yes. (T): Ok, now close your eyes and touch your bulges. Tell me what you feel. (P): (the patient does the experiment). I don’t feel it, if I touch it I don’t feel the bulges. (T): Good, what do you think this means?… (P): I don’t know, when I look at them I see them. (T): How would you explain that? (P): I don’t know, I suppose it could mean that everything is in my mind. But I see that I am deformed!

Since this experience, we reformulated her belief and divided it into two: “my body is deformed by vision” and “my body is deformed by touch”. The discrepancy she considered between both sensorial modalities was evidence for the alternative explanation (“this is in my mind”).

Mood importance

We worked so that Sara could be aware of the link between her emotional mood and the concern about her deformed body. To do so, the following questions were asked: “how would you explain that when you are in a good mood you see yourself as less deformed than when you are depressed? Or that when you are
cheerful, you focus on what you are doing and you are less aware of your body?... what does all this evoke in you?”. This approach helped to consider the alternative explanation.

**Homework**

Sara completed homework throughout: imaginal exposure, tactile exploration and progressive relaxation techniques. However, at the beginning we had to deal with some difficulties related to unrealistic expectations of the patient. She thought, for example, that the aim of relaxation “was to avoid feeling anxiety the whole day”. During the relaxation exercises she had thoughts like “when I lay down thoughts of being deformed come to my mind” and this generated anxiety so she avoided that exercise. Additionally, with regards to the visual and tactile exposure exercises, we also noticed a misunderstanding that explained the lack of execution, as a resource to favour the generation/verification of the alternative hypothesis. These clarifications allowed Sara to systematically do both exercises with the consequent benefits.

**Results**

Progressively, the emotional distress was reduced and Sara started to get her social contacts back and began to consider a return to work life. She continued to see herself as deformed but she was no longer extremely disturbed by the possibility of others looking at her: “no one was surprised, no one said anything about my body”... “my deformity must be very small, people don’t perceive it... although I am deformed... I don’t know... maybe my perception is a bit exaggerated” (this last argument was in line with the alternative hypothesis).

Sara’s progression was slow but continuous. Gradually, she realized that if she took cognitive and behavioural distance from her body, she could focus on other aspects of her life and question, partially, the deformity belief, whereas the alternative explanation (“it is all in my mind”) was gaining ground.

The progress was positive. Sara informed us she was feeling better, at a social and functional level: “I go to the gym”, “I go out with friends”, “I am happy about this change”. She also went back to work, where at the beginning she was asked to do less demanding tasks.

At the follow-up, Sara was working normally, she also reported not to see herself as deformed. The degree of conviction in the alternative explanation (“it is all in my mind”) was 100%. We continued this monitoring for one year.

Twelve months later we had the last session. It was then confirmed that work, social and personal relationships were restored and the degree of conviction in the dysmorphic belief was of 0%. We proceeded with the discharge of the patient from our Mental Health Rehabilitation Service, maintaining drug treatment revisions in the original mental healthcare clinic. Sara went from isolation and inactivity to the restoration of a social and work life.

Table 2 shows the results of the different measures collected during the process, highlighting a satisfactory and clinically significant response. Psychotic symptoms (delusions and perceptual alteration) were resolved. Anxiety and depression variables were normalized and self-esteem increased.

### Table 2

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Rating (min-max)</th>
<th>PRE</th>
<th>POST</th>
<th>MON1</th>
<th>MON2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delusions</td>
<td>1-7</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hallucinations</td>
<td>1-7</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>BDI</td>
<td>0-63</td>
<td>30</td>
<td>12</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>BAI</td>
<td>0-63</td>
<td>35</td>
<td>9</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>RSES</td>
<td>10-40</td>
<td>30</td>
<td>31</td>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>

PRE = Pre-CBT-stage; POST = Post-CBT-stage; MON1 = Monitoring at month 12; MON2 = Monitoring at month 24; Delusions = Severity item “delusions” in PANSS and Hallucinations = Severity item “hallucinatory-behaviour” from PANSS (1-7: absent/extreme intensity); BDI = Beck Depression Inventory; BAI = Beck Anxiety Inventory; RSES = Rosenberg Self-Esteem Scale.

With the exception of the RSES, on all the scales, a higher score indicates a greater degree of severity. In the case of the RSES, a higher score indicates a greater degree of self-esteem.

### Table 3

<table>
<thead>
<tr>
<th>Dysfunctional beliefs</th>
<th>PRE</th>
<th>POST</th>
<th>MON1</th>
<th>MON2</th>
</tr>
</thead>
<tbody>
<tr>
<td>My body is deformed</td>
<td>100%</td>
<td>50%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>It is in my mind, is a mental disorder</td>
<td>0%</td>
<td>50%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>I need to have a good body to go out</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>People see me deformed</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I have to be liked by people</td>
<td>100%</td>
<td>50%</td>
<td>50%</td>
<td>30%</td>
</tr>
<tr>
<td>Having a deformed body has no importance</td>
<td>0%</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>In order to experience good mood you have to be happy with your body</td>
<td>100%</td>
<td>50%</td>
<td>30%</td>
<td>30%</td>
</tr>
</tbody>
</table>

PRE = Pre-CBT-stage; POST = Post-CBT-stage; MON1 = Monitoring at month 12; MON2 = Monitoring at month 24

**Discussion**

The current work shows how to adapt CBT to dysmorphic-delusional disorder. We are aware that the limitations inherent to case studies mean that it is not possible to attribute the patient improvement to the therapy with certainty. However, positive changes observed in the psychopathology as well as in the social functioning when applying CBT, after one year of resistance to the drug treatment, suggest the efficiency of the psychological intervention. Nevertheless we cannot specify which components and resources used during the therapy (evidence analysis, search for alternatives, exposure techniques, elegant solution, behavioural activation...) had a greater or lesser impact on the outcomes.

CBT does not need to result in the eradication of the delusional beliefs. Usually the degree of conviction in the delusional belief...
is held to some extent. The most important aim is to develop the alternative belief and to relieve suffering. Personal functioning improves when the degree of concern decreases. This happened for Sara, who reduced the focus she had on her body and could concentrate, efficiently, on the recovery of her work life and social relationships. We can assume that the improvement we saw in Sara is an example of the recovery approach principles. So the therapy, instead of focusing only on concrete symptoms, expands the focus to the person’s global functioning.

During our work in the follow-up phase, after the intervention, Sara mentioned the weakening of the dysmorphic belief. Sara saw herself as normal and was convinced that everything was due to a mental disorder. However, despite this final result, we have to take into account that the applied measures were cross-sectional evaluations and so possible variations in between the points of data collection could not be captured. In fact, there were stressful life events as a result of the difficulties of a new romantic relationship that provisionally reactivated the deformity belief. This was expected because Sara was vulnerable to experiencing psychotic symptoms. According to the cognitive ABC model, triggers and stressors that were present for the patient before therapy, may well still activate the underlying dysfunctional assumptions, even having had a successful therapy, which will not necessarily eliminate them definitely. However, the symptomatic reactivation took place within the personal formulation and desisted with the usage of the skills developed during the therapy.

People with psychotic disorders are vulnerable to stress and daily life difficulties. In line with the recommendations from the CPG, treatment plans should include, as a basic component, long term psychological treatment, applied with different intensity levels according to the circumstances or stage of recovery in which the patient finds him/herself.

Recently, the third wave approach of CBT has been applied to psychosis, such as mindfulness (Chadwick, 2014). CBT may also help if patients refuse or discontinue their pharmacological treatment (Morrison et al., 2014).

We consider this therapeutic option encouraging as it is based on a recovery approach, instead of only a reduction or elimination of the symptoms as efficiency criterion. This way, people are able to develop their own autonomy and a feeling of self-efficiency when facing difficulties and personal concerns.

References


