Behavioural and Cognitive Psychotherapy, 2017, 45, 79–84
First published online 21 July 2016 doi:10.1017/S1352465816000321

Cognitive Behavioural Therapy for Paruresis or "Shy Bladder Syndrome": A Case Study

David Hambrook

Talking Therapies Southwark, South London and Maudsley NHS Foundation Trust, UK

Tracey Taylor and Victoria Bream

Centre for Anxiety Disorders and Trauma, South London and Maudsley NHS Foundation Trust, UK

Background: Paruresis, or "shy bladder syndrome", is a relatively common anxiety disorder, yet little is known about the causes of, and effective treatments for this disabling condition. **Aim:** This report describes a case study in which a man (Peter) presenting with paruresis was treated using formulation-driven CBT, which aimed to address the idiosyncratic processes that were maintaining his anxiety and avoidance of urinating in public. **Method**: Peter attended 12 sessions of CBT including one follow-up session a month after treatment had ended. Treatment involved collaboratively developing an idiosyncratic case conceptualization (identifying longitudinal and cross-sectional factors involved in the development and maintenance of his difficulties), followed by a number of standard cognitive and behavioural interventions commonly used in evidence-based CBT protocols for other anxiety disorders. Peter completed sessional outcome measures of paruresis symptomatology, anxiety, depression, social anxiety and functional impairment. **Results:** Peter subjectively found the intervention helpful and his scores on all of the outcome measures reduced over the course of his therapy, and were maintained at one month follow-up. **Conclusions:** This report adds to the scarce literature regarding effective treatments for individuals suffering with paruresis. Limitations of the design are acknowledged and ideas for further research in this area are discussed.

Keywords: Paruresis, shy bladder syndrome, case report, cognitive behavioural therapy

Introduction

Paruresis, sometimes termed Shy Bladder Syndrome, refers to the inability to initiate or sustain urination in situations where there is a perception of real or potential scrutiny from others, accompanied by significant fear and anxiety, avoidance of feared situations, and subsequent negative impact on psychosocial functioning (Boschen, 2008). Paruresis has previously been subsumed within the diagnostic boundaries of Social Phobia in DSM-IV-TR (American Psychiatric Association, 2000), although putative diagnostic criteria for paruresis

Correspondence to David Hambrook, South London & Maudsley NHS Foundation Trust, Talking Therapies Southwark, Middle House, Maudsley Hospital, Denmark Hill, London SE5 8AZ, UK. E-mail: david.hambrook@slam.nhs.uk

as a distinct clinical entity have been proposed (Boschen, 2008). Evidence suggests that paruresis is not uncommon, affecting approximately 2.8% of men, although it can and is also experienced by females (Hammelstein, Pietrowsky, Merbach and Brähler, 2005). People with paruresis often delay seeking help due to shame and embarrassment regarding their condition. There is a general lack of awareness of paruresis amongst clinicians, and at present there is a rather limited evidence-base regarding effective treatments (Boschen, 2008).

Whilst the debate continues regarding the status of paruresis in the psychiatric nomenclature (e.g. Hammelstein and Soifer, 2006), no research to date has specifically investigated the efficacy of evidence-based interventions for social anxiety in people with a primary presentation of paruresis. Boschen (2008) reviews the extant evidence-base for both pharmacological and psychological therapies in paruresis, and concludes that there is a small amount of positive evidence from case studies that in vivo behavioural exposure treatments may be effective in promoting urination in people experiencing paruresis. Within the treatment outcome literature there is a distinct paucity of research into cognitive interventions for paruresis.

Method

The case study presented here outlines a course of cognitive and behavioural therapy for a man, who we will call "Peter", presenting with primary paruresis. Given the lack of empirically supported cognitive behavioural case conceptualization models or treatment protocols for paruresis, an idiosyncratic case conceptualization (or formulation) was developed with our patient through the use of detailed functional analysis and assessment. The formulation considered cognitive, behavioural, emotional, and physiological factors that may have contributed to the development and maintenance of his paruresis. The formulation and the therapeutic interventions derived from it draw on established cognitive behavioural models and treatment of other anxiety disorders (e.g. Obsessive-Compulsive Disorder – Salkovskis, 1999; Social Phobia – Clark and Wells, 1995), as well as ideas from Boschen (2008), who outlines putative cognitive and behavioural factors in the maintenance of paruresis. Whilst Boschen's model and the treatment interventions suggested by it are intuitively appealing, it has yet to be subjected to empirical evaluation.

Patient profile

Peter was a gay man in his 40s and was referred by his general practitioner (GP) to his local Increasing Access to Psychological Therapy (IAPT) service in London. His main presenting concern was difficulty in initiating and sustaining urination in situations where he might be seen and/or heard urinating by others. This was causing significant subjective anxiety and difficulty urinating in a range of social/public situations (e.g. airplanes, nightclubs, public toilets, urinals at work) and at home when there was the possibility that someone might hear him. Peter completely avoided using public toilets unless he could be absolutely certain that no one would hear/see him urinating. His difficulty urinating, and the anxiety and avoidance associated with this, had significantly reduced his quality of life, leading to difficulties at work and in his recent relationship, making travelling difficult, and was limiting his ability to engage in previously enjoyed social activities (e.g. clubbing). Organic causes for his difficulty urinating had been excluded by his GP. Our assessment indicated he fulfilled all the draft

https://doi.org/10.1017/S1352465816000321 Published online by Cambridge University Press

diagnostic criteria for paruresis proposed by Boschen (2008). Peter reported he had been "shy" about urinating in public since his childhood, but it only really became a noticeable and distressing problem for him around 10 years previously, when he moved to the UK from a British Overseas Territory, and started attending gay clubs socially.

Measures

Peter completed validated self-report outcome measures at every therapy session and at 4-week follow-up. The main outcome measure was the Shy Bladder Scale (SBS; Deacon, Lickel, Abramowitz and McGrath, 2012); a psychometrically sound 17-item scale measuring subjective difficulty urinating in public, impairment and distress, and paruresis-related fear of negative evaluation. A total score is derived by summing the individual responses to each of the scale items; higher scores represent greater anxiety, impairment and distress. In his initial assessment, Peter scored 59 on the SBS, which is close to the mean score for a clinical group of individuals meeting criteria for paruresis ($M = 57.8$; $SD = 8.4$ – Deacon et al., 2012). Other outcome measures are reported in the online supplementary material.

Procedure and intervention

Peter provided informed consent to undergo treatment for his condition and for this case study to be submitted for publication. Peter attended 12 sessions of CBT over 15.5 hours, including an initial assessment session and a follow-up session one month after his final treatment session. Sessions were conducted by the first author (a clinical psychologist with post-graduate training in CBT), supervised by the second and third authors. Peter's sessions followed a standard collaborative CBT structure. The first few sessions involved goal-setting and developing a shared developmental and maintenance case conceptualization with Peter (see supplementary material online). The formulation draws on Clark and Well's (1995) cognitive model of Social Phobia (e.g. incorporating the important maintaining role played by self-focused attention) and elements of Salkovskis' (1999) developmental-maintenance model of Obsessive Compulsive Disorder (OCD), emphasizing the role of the appraisals that individuals make regarding intrusive thoughts/images in leading to distress and safety-seeking behaviours. Peter's formulation and interventions derived from it also drew on Boschen's (2008) maintenance model for paruresis, which incorporates established cognitive and behavioural theory to describe how paruresis is maintained. Interventions suggested by Boschen, based on the hypothesized maintaining factors in his model, include psychoeducation (e.g. about the functioning of the bladder when in an anxious state; the ubiquity of paruretic symptoms), cognitive restructuring (e.g. to help the patient reappraise unhelpful beliefs about others as critical evaluators), in-vivo exposure and behavioural experiments (e.g. to drop safety behaviours and empirically gather evidence to test beliefs) and attention training (e.g. to help clients redeploy attention away from the self).

After developing a shared formulation of his problem, subsequent sessions proceeded in a joint attempt to try and help Peter break or interrupt the "vicious cycles" maintaining his paruresis. Key interventions included goal-setting, introducing the "Theory A/Theory B" idea to help him see his problem as one of worry and anxiety rather than him being "weak" or "abnormal", psychoeducation regarding the physiological effects of anxiety on urination, surveys (e.g. to normalize "stage fright" when urinating in public, to gauge what others really

https://doi.org/10.1017/S1352465816000321 Published online by Cambridge University Press

Table 1. Session-by-session outcome measure scores

Session	Shy Bladder Scale
Assessment	59
1	55
2	57
3	57
4	56
5	59
6	57
7	57
8	53
9	39
10	33
1 month follow-up	25

think when they hear someone urinating in public), attention training (i.e. to reduce self-focused attention in toilet situations), interrupting rumination cycles and re-focusing on the present moment, and behavioural experiments to test the validity of Peter's threat appraisals whilst dropping key safety-seeking behaviours. This involved both in-session interventions and agreed 'homework' tasks, and required creativity and spontaneity on the part of both therapist and patient in designing specific experiments. For example, in one session Peter drank a significant amount of liquid and then, accompanied by the therapist, visited a local pub with the specific aim of urinating in the bathroom whilst there. This in vivo experiment helped to build Peter's confidence and test his anxious predictions. A thorough relapse prevention plan and "therapy blueprint" was also developed towards the end of Peter's sessions.

Results

Peter's scores on the SBS reduced over the course of his therapy (see Table 1). By his final session his SBS scores were markedly lower than population norms ($M = 57.84$, $SD = 8.91$) for individuals suffering from paruresis (Deacon et al., 2012). This suggests that by the end of therapy Peter was experiencing much less difficulty urinating in public, less impairment and distress, and less paruresis-related fear of negative evaluation. Peter's scores on the SBS had continued to reduce even further by his follow-up session, suggesting the progress he made in therapy was continued after his weekly CBT sessions had ended. Subjectively, Peter reported that he had made significant progress over his course of therapy, and was able to achieve one of the biggest and most daunting goals that he set himself; a long-haul aeroplane journey involving a very long flight and using the on-board toilet. He was also regularly using public toilet facilities in his daily life (e.g. at work, when out socially).

Discussion

This case study illustrates the application of individualized, formulation-driven CBT for a man experiencing distress and reduced quality of life due to paruresis. In this case, the course

https://doi.org/10.1017/S1352465816000321 Published online by Cambridge University Press

of therapy was well received by Peter, and his outcomes demonstrate a marked reduction in symptomatology and impairment, supported by his subjective report that he found the therapy helpful in achieving his goals. Importantly, Peter's progress was maintained at follow-up, indicating that the helpfulness of the intervention as more than just a "sticking plaster". The findings presented here suggest that an idiosyncratic case-conceptualization, drawing on a recent theoretical maintenance model for paruresis (Boschen, 2008), as well as established and empirically supported models for other anxiety disorders (social anxiety and OCD), was helpful in guiding effective cognitive and behavioural interventions, in the absence of a solid evidence-base to draw on.

Nevertheless it is important to acknowledge that the current report is of a single case study. Further research is required using larger samples of individuals with paruresis to empirically establish the range of cognitive, behavioural, emotional and physiological factors that maintain paruresis across individuals. Experimental and clinical research in the last 30 years has led to huge advances in our understanding of the processes that confer vulnerability to, and maintain, specific anxiety disorders. Such research has been translated into the development of treatment protocols that have shown demonstrable efficacy in large-scale randomized controlled trials. We would call for further similar coordinated effort to be directed at gaining a better understanding of paruresis specifically. Such research could lead to the refinement and evaluation of putative theoretical models to help us better understand the causes and maintenance of this highly distressing and life-limiting condition, and suggest potentially effective interventions that can then be evaluated empirically.

Supplementary material

An extended version is also available online under the Brief Clinical Report Supplementary Materials tab in the table of contents. Please visit http://dx.doi.org/10.1017/S1352465816000321.

Acknowledgements

We would like to praise Peter for his considerable hard work, determination and bravery in overcoming his difficulties, and for permitting the publication of this anonymized description of his therapy.

Conflict of interest: The authors have no conflicts of interest with respect to this publication.

References

American Psychiatric Association (2000). *Diagnostic and Statistical Manual for Mental Disorders, (4th ed. Text Revision)*. Washington: American Psychiatric Association.

Boschen, M. J. (2008). Paruresis (psychogenic inhibition of micturition): cognitive behavioural formulation and treatment. *Depression and Anxiety, 25*, 903–912.

Clark, D. M. and Wells, A. (1995). A cognitive model of social phobia. In R. Heimberg, M. Liebowitz, D. A. Hope and F. R. Schneier (Eds.), *Social Phobia: diagnosis, assessment and treatment* (pp. 69–93). New York: Guilford Press.

Deacon, B.J., Lickel, J.J., Abramowitz, J.S. and McGrath, P.B. (2012). Development and validation of the shy bladder scale. *Cognitive Behaviour Therapy, 41*, 251–260.

Hammelstein, P., Pietrowsky, R., Merbach, M. and Brähler, E. (2005). Psychogenic urinary retention (paruresis): diagnosis and epidemiology in a representative male sample. *Psychotherapy and Psychosomatics, 74*, 308–314.

Hammelstein, P. and Soifer, S. (2006). Is "shy bladder syndrome" (paruresis) correctly classified as social phobia? *Anxiety Disorders, 20*, 296–311.

Salkovskis, P.M. (1999). Understanding and treating obsessive-compulsive disorder. *Behaviour Research and Therapy, 37*, s29–s52.