UNDERSTANDING AND TREATING PSYCHOGENIC VOICE DISORDER

A CBT Framework

PETER BUTCHER, ANNIE ELIAS AND LESLEY CAVALLI

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He who is in harmony with the Tao
is like a newborn child . . .
It can scream its head off all day,
yet it never becomes hoarse,
so complete is its harmony.

Lao Tzu

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ABOUT THE AUTHORS

Peter Butcher BA (Hons), MPsychol, CPsychol, Associate Fellow of the British Psychological Society(AFBsPS); and an accredited member of the British Association of Behavioural and Cognitive Psychotherapies (the BABCP).

Peter has experience working as a cognitive behaviour therapist since the 1970s, a special interest in sharing psychological skills with others, and 20 years association with speech and language therapists working with psychogenic voice disorders. Peter has published widely in international journals on CBT and related subjects, including psychogenic voice, and he has presented papers on these subjects at national and international conferences.

In the field of training non-psychologists in the use of psychological methods, Peter has co-edited *Sharing Psychological Skills*, a special issue of the *British Journal of Medical Psychology* in 1985. In the area of psychogenic voice disorders, Peter has authored or co-authored a number of research and theoretical pages, as well as co-written (with Annie Elias and Ruth Raven) *Psychogenic Voice Disorder and Cognitive Behaviour Therapy* (Whurr, 1993) and co-authored (with Lesley Cavalli) a case study of combined speech and language/psychological treatment in *Wanting to Talk* (Whurr, 1998).

Lesley Cavalli MSc BSc(Hons) CertMRCSLT, Specialist Speech and Language Therapist and Lecturer in Voice Speech and Language Therapy Department, Great Ormond Street Hospital NHS Trust & Department of Human Communication Science, University College, London.

Lesley Cavalli currently combines her clinical work at Great Ormond Street Hospital with a lectureship in Voice at University College, London. She started her career as a Speech and Language Therapist in 1988 and has specialised in voice disorders in her clinical work, teaching and research for the past 16 years. Her current clinical post involves the tertiary assessment and treatment of children and young adults with a wide range of ENT-related conditions, including psychogenic voice disorders. She is the lead Speech and Language Therapist for the Joint Paediatric Voice Clinic at Great Ormond Street Hospital and Deputy Head of the Speech and Language Therapy Service.

Annie Elias, Specialist Speech and Language Therapist in Voice, The Kent and Canterbury Hospital.

Annie Elias has worked with children and adults with voice disorders since qualifying as a speech and language therapist in 1980. In her first post at The Royal London

Hospital both Annie and her colleague Ruth Raven began working in a model of co-therapy sessions with Peter Butcher. Together they explored combining voice therapy with CBT and this led to several journal articles and an earlier text. Annie moved to Kent in 1986 to become Head of Speech and Language Therapy Services for part of East Kent. She has maintained a specialist clinical caseload in voice and is a visiting lecturer in Voice at University College, London.

FOREWORD

A human voice reflects the condition of the individual at the moment he or she speaks. It is the product of the speaker's anatomy, physiology, neurology, cultural background, health and psychological status. The synergy of these foundation elements affects the structure and function of the vocal tract and, in particular, the larynx and vocal folds. Consequently, the study of the human voice is pursued by many disciplines, both artistic and scientific, and ranging from those whose main concern is with voices which might be regarded as falling within normal limits to those which might be judged to be superior, such as those of vocal performers, or pathological, as in the case of individuals with voice disorders.

The effect of a disordered voice (dysphonia) or complete loss of voice (aphonia) is usually much greater for affected speakers than the difficulty of making themselves heard. When it is within normal limits, in addition to rendering the oral message audible, the voice conveys paralinguistic features which enhance or refute the language employed by the speaker. Equally important, listeners make judgements about the speaker according to the amalgam of acoustic parameters such as pitch, loudness, vocal quality and flexibility. Speakers who do not have the full range of vocal features and nuances at their disposal have to cope not only with the obvious practical disadvantages but also with the difficulties of conveying the subtleties of conversation and self-image which are an integral part of human interaction.

The development and increased use of videostrobolaryngoscopy, the gold standard of laryngeal examination, during the past 30 years, has resulted in the potential for much more accurate diagnoses of the causes of voice disorders. It has also resulted in the establishment of multidisciplinary voice clinics in the best centres globally. The core disciplines in such clinics are ear, nose and throat surgeons and speech and language therapists/pathologists who specialise in the analysis, diagnosis and treatment of patients with voice disorders. In some centres, members of other disciplines, such as voice scientists, psychologists, osteopaths and singing teachers also contribute their expertise. The most important task initially is that an accurate medical diagnosis of the cause of the voice disorder should be made; this is the responsibility of the ENT surgeon ultimately. Decisions are then made as to whether the treatment should be surgical, medical, a course of voice therapy or a combination of these elements.

Traditionally, a diagnosis of psychogenic voice order is a diagnosis of exclusion. It is made when thorough laryngeal examination and, where necessary, more extensive investigation does not reveal any organic cause for the voice disorder. Until now, it is at this point that terminology and classification have been vague, interchangeable and non-specific, frequently resulting in inaccurate usage. Terms such as 'functional

dysphonia' and 'conversion symptom aphonia' are used routinely to refer to psychogenic voice disorders, with little regard for their true meaning or the actual aetiology of the condition concerned. Clinicians are also aware that in addition to being a primary feature, psychological aspects occur in a variety of voice disorders as secondary and compounding elements. On the basis that accurate terminology and classification is relevant to the intervention undertaken, this book makes an important contribution by clarifying a classification structure and by developing relevant terminology. It then proceeds to build on this carefully considered foundation to explain, suggest and give practical examples of the way in which cognitive behaviour therapy can be used in the treatment of psychogenic voice disorders.

This text is unique in its careful analysis of the issues involved in both the diagnosis and treatment of psychogenic voice disorders. It is also unusual in the field of voice pathology in demonstrating the obvious benefits of close collaboration between speech and language therapists/pathologists and psychologists. Through their writing here and in previous publications, the authors demonstrate the enormous benefits which clinicians, and therefore their patients, can derive from working in an experienced multidisciplinary team. They acknowledge how much they learn from each other; the result is a text in which the contributions from each discipline are recognised as being complementary and essential. This book succeeds in making its well-considered case for the use of cognitive behaviour therapy by speech and language therapists/pathologists as an important element of a battery of therapeutic techniques. It should enable experienced clinicians to further develop their skills and give the less experienced insight into the complexity of psychogenic voice disorders and their resolution. The authors are to be congratulated on producing a thoughtful and reflective text which clearly encompasses their combined clinical experience and their ongoing commitment to improving treatment for individuals with psychogenic voice disorders.

Lesley Mathieson Frcslt
Visiting Lecturer in Voice Pathology
Institute of Laryngology and Otology
University College London
January 2007

FOREWORD

Human voice has an intimate relationship with emotions. To start with, voice can induce emotions. In adolescence, during the most emotional time of our lives, we spend considerable amount of time and resources having our emotions stirred by listening to vocalisations recorded for this simple purpose and produced by singers who, just on the strength of modulating their voice, become objects of love and admiration. But the relationship goes the other way as well and emotions affect human voice. It is the core assumption of the diagnosis of psychogenic voice disorder that emotions can actually disrupt normal functioning of the vocalisation system.

Overall, the notion that a lot of physical symptoms have a psychological origin is not as solid as it once appeared. From early psychoanalytical lists of psychogenic somatising disorders only a few remain. From skin diseases to asthma, illnesses once considered suitable for psychotherapy are now seen to be of physical origin. Not long ago, stomach ulcers were widely attributed to stress, until Warren and Marshall discovered they are caused by helicobacter pylori and curable by antibiotics. The field is plagued by the famous ease with which a neurotic conflict can be found if we only look hard enough. Psychoanalytically oriented therapists have the dubious distinction of improving the hit rate to impressive 100% by postulating that if the patient shows no neurotic symptoms or behaviour whatsoever, this by itself proves that they are converting their emotional turmoil into whatever physical disease they suffer.

As far as certain types of voice disorders are concerned though, the psychogenic hypothesis holds well. The psychological causation can be obvious, and psychological treatments evidently useful. The authors of this book are of course well aware of the dangers of over-diagnosing emotional effects, and they take care to discuss, for instance, the tricky feat of differentiating distress caused by illness from that which may be its cause. The diagnostic process is covered extensively. The book provides a thorough coverage of an important and under-served field. It discusses a range of key issues concerning the assessment and cognitive behavioural treatment of psychogenic voice disorders, accompanied by useful practical examples and case studies. Peter Butcher, who leads the team of authors, is known in the field as an experienced, sensitive and humane therapist and a versatile thinker. These characteristics are evident throughout the book. The authors have put together probably the best and most detailed resource available to learn about the practicalities of dealing with this often mysterious and disabling condition.

Peter Hajek
Professor of Clinical Psychology
Queen Mary's School of Medicine and Dentistry
University of London

PREFACE

The genesis of this book really goes back to a day in the early 1980s. At that time both Annie Elias and Peter Butcher were working in the Out Patient Building of the London Hospital, Whitechapel; the Department of Speech and Language Therapy being on the second floor and the Department of Psychology situated a floor above. On this auspicious day, Annie approached Peter with a request. She said she had a number of 'non-organic' aphonic and dysphonic patients that were not responding to standard voice therapy or, if they did respond, they quickly relapsed. From her observations of this group of patients Annie thought there might be psychological factors making them difficult to treat. She wondered, therefore, whether Peter would be willing to see some of these patients in order to offer an opinion. Peter vividly recalls thinking and saying 'Well, I know nothing about voice disorders but the patients sound fascinating and - if there is a psychological cause - I can't think why cognitive behaviour therapy wouldn't have something to offer.'

As a result of this discussion, Annie and Peter arranged to see the patients jointly so that they could share their respective knowledge of assessment and treatment in voice and cognitive behaviour therapy. This collaboration and mutual support quickly bore fruit and their joint assessments not only revealed a variety of individual differences but, more importantly, showed interesting commonalities in the psychological characteristics and personal conflicts of these patients. As a result, this led naturally to a particular psychological focus in the treatment they began to offer. In this way, the joint sessions became an exciting journey of discovery in which the clinical psychologist became familiar with psychogenic voice disorders and the speech and language therapist had first hand contact with cognitive behavioural interviewing and treatment techniques.

Annie and Peter were particularly fortunate in being joined for parts or much of their journey by other interested and enthusiastic colleagues, including Ruth Raven, Jenny Yeatman, and Lesley Cavalli from the Department of Speech and Language Therapy at the London Hospital; David Littlejohns from the Department of Therapeutics at the London Hospital Medical College; and Catherine Austin, clinical psychology doctoral student from the University of East London. They also gained inspiration and encouragement through their contact with other specialists in the field of voice – especially Arnold Aronson in America and Janet Baker in Australia – who in their own writing and research have stressed the importance of psychological factors in medically unexplained voice disorders.

What were the findings of the initial study of 19 individuals that suggested new ways of looking at the origin, the nature and the treatment of psychogenic voice disorder?

Three things emerged. First, these cases indicated that the traditional Freudian concept of hysterical conversion - while a helpful way of viewing some individuals - did not adequately describe what was happening, psychologically, in the vast majority of patients. Secondly, the psychological assessment pointed to particular cognitive behavioural factors that were influential in triggering and maintaining the functional voice disorder in around 9 out of 10 patients. Thirdly, the new formulation suggested that cognitive behaviour therapy techniques should be of value in treating the majority of patients and, when this was explored, the approach produced very encouraging results. After reaching these (initially very tentative) conclusions, it was particularly encouraging to discover that the findings were being independently supported by other researchers using larger samples and random controlled studies.

Another implication from the research was that speech and language therapists ought to be familiar with cognitive behaviour therapy when working with voice patients and that co-therapy with an experienced therapist can be an ideal way of learning about this method of treatment. However, this is an ideal that may be difficult to achieve. Psychology departments and speech and language therapy departments are not always a short flight of stairs apart and the speech and language therapist may not always have access to an interested and willing psychologist. If speech and language therapists specialising in voice are to gain competence in using psychological methods in their work, they may have to find other opportunities or seek other ways of being exposed to a similar sort of learning experience. Experiential workshops, training days, and short courses can be a start but voice therapists will still have to find some way of obtaining psychological supervision with on-going cases. At this stage there are no easy and quick solutions to these challenges. However, as our understanding of psychogenic voice disorder expands, the authors are hopeful that ways will be found to train and support voice therapists in the use of psychological techniques. In this context, the authors' offer this volume as a small contribution to the training of therapists and hope it will provide new ideas and practical material for therapists working with individuals who cannot find the means within themselves to voice what they feel.

Peter Butcher
Annie Elias
Lesley Cavalli
London and Canterbury, 8 December, 2006

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We would like to pay tribute to the very many patients who have shared so much of themselves and who have been our inspiration.
Additionally we would like to dedicate this book to our families:

To Bernice, Luke and Adam for their always stimulating love and companionship.

Peter

To Paul, who is my rock, for his unwavering support. To my children, Lucy, Clemmie and Izzy for their tolerance and their humour.

Annie

To my husband Philip, for his belief in me and constant support, and to my precious boys, Miles and Rory who were only dreams at the start of this project but have since 'sat' tolerantly, as honorary members, through many book meetings. Thanks also to other family members, friends and professional colleagues who have continued to inspire, encourage and advise me along the journey so far.

Lesley

1 Psychogenic Voice Disorders – A New Model

Speech and language therapists face challenges both in recognising when their patient has a psychogenic voice disorder and in knowing how to manage the case effectively. To get to this point it is necessary to understand what is meant by psychogenic voice disorder, to be informed about common aetiological features of this group of patients and to know how to make a competent assessment. At this stage it is necessary to have a clear idea, from evidence-based practice, as to how this population might respond to therapy and what treatment strategies are likely to be of value.

Despite agreeing that this small group of patients exists, the literature has to date been confusing about both terminology and classification and there are a limited number of reports of evidence-based treatment protocols. There is nervousness amongst speech and language therapists around both confident diagnosis and subsequent management.

In this chapter we set out a working model of psychogenic voice disorders (PVDs) as a guide to the clinician working in this area. We provide the speech and language therapist (SLT) with a framework for recognising and classifying this patient group. In subsequent chapters we will offer guidance to the speech and language therapist in assessing and managing these voice disorders within a psychological framework that incorporates clinical supervision. We also provide an explanation for when, in some complex cases, psychological referral is indicated.

A DEFINITION OF PSYCHOGENIC VOICE DISORDER

Drawing from previous definitions and classification systems, it is our view that a **psychogenic voice disorder** is a dysphonia (impaired or disordered voice) or aphonia (absent voice) where the causative or perpetuating factors are largely of psychological or emotional conflict. The voice problem may manifest itself with musculoskeletal tension and hyperkinetic behaviours and these may eventually give rise to laryngeal pathology, these being products or symptoms of the underlying psychological cause and the process of conversion.

What is critical here is that a confident diagnosis is reached only through careful psychological evaluation. A diagnosis of psychogenic voice disorder must not be made simply by *exclusion* of laryngeal pathology, in the way that the terms functional or non-organic might be employed. It is, of course, essential to have clarified the nature of any organic pathology through detailed laryngoscopic and preferably stroboscopic examination, however, the presence of negative results does not by default imply

psychogenic causes. Assessment must be *inclusive* of psychological factors to a critical level and have clarified the causative and perpetuating role of these factors before diagnosis can be confirmed. The psychological evaluation will be outlined in Chapter 4.

Since musculoskeletal tension is a feature common to these voice disorders, we have said before that, 'the decision as to whether a voice disorder might be termed hyperkinetic or hyperfunctional rather than psychogenic is more a question of the degree to which underlying emotional stresses contribute to the dysphonia and of the degree of influence that those stresses have in perpetuating patterns of excessive laryngeal tension' (Butcher et al. 1993, p. 4).

PHYSIOLOGICAL AND PERCEPTUAL FEATURES OF PSYCHOGENIC VOICE DISORDERS

Although there is overlap in the presenting phonatory and laryngeal signs and symptoms between muscle tension dysphonias and psychogenic dysphonias, there are often some features that are specific to a psychogenic dysphonia and are therefore helpful to the diagnosis. The phonatory and laryngeal signs and symptoms of a psychogenic aphonia are more diagnostically conclusive, and there are few types of voice disorder that present so dramatically.

Tables 1.1 and 1.2 illustrate the common presentations of psychogenic voice disorders and further helpful description can be found in Mathieson's text (2001, pp. 197–201).

Table 1.1: Physiological and perceptual features of psychogenic dysphonia

Phonatory Signs and Symptoms

- Perceptual features *may be* similar to muscle tension dysphonia.
- It may be inconsistent with clinical examination i.e. significantly abnormal voice despite absence of laryngeal pathology or only mild pathology.
- Variable voice, which may be normal during laughing/crying yet abnormal in conversation, and may be worse according to emotional context of speech.
- Dysphonia may be episodic.
- SLT may facilitate immediate normal voice.

Physiological Presentation, may be various, for example:

- 'normal' larynx i.e. no laryngeal pathology or neuropathology
- normal laryngeal function on a cough, laugh, breath hold
- incomplete vocal fold adduction or a glottic chink
- bowing of vocal folds
- hyperadduction of vocal folds
- supraglottic constriction i.e. ventricular band involvement and anterior-posterior squeezing
- laryngeal pathology (e.g. nodules)

Vocal Profile

May be forced, breathy, weak, with harshness or creak. May be in falsetto and may have pitch and phonation breaks. May have variable dysphonia interspersed with normal voice.

Table 1.2: Physiological and perceptual features of psychogenic aphonia

Phonatory Signs and Symptoms

- loss of voice of sudden onset
- may have had frequent and increasing aphonic episodes; may have had immediate aphonia
- may have occasional squeaks of voice
- usually normal vegetative behaviours
- SLT may facilitate immediate normal voice

Physiological Presentation, may be various, for example:

- incomplete vocal fold adduction
- glottic chink
- hyperadducted ventricular band
- bowing of vocal folds
- normal adduction for cough

Vocal Profile

- whisper
- sometimes only mouthing
- usually a normal cough, grunt etc.

COMMON AETIOLOGICAL FACTORS OF PSYCHOGENIC VOICE DISORDERS

Before presenting our model let us remind ourselves of other contributing evidence that has shaped our thinking. We can now draw on much research and literature that informs us about the aetiological features of these voice disorders. Psychogenic voice disorders are frequently multifactorial and have common factors, which we have summarised in Table 1.3. We will elaborate on these features when discussing assessment in Chapter 4. Appreciating the psychological aetiology of these voice disorders and being able to positively identify the aetiological features is critical in leading the speech and language therapist to a confident diagnosis and treatment of psychogenic voice disorder. Thus, a psychogenic voice disorder is confirmed provided that, first, a primary organic process has been carefully eliminated and second, that psychological aetiological features are identified alongside the phonatory and laryngeal presentations described above.

This assessment of the aetiological features is essential for the SLT because a diagnosis of psychogenic voice disorder implies that 'for true resolution, predisposing, precipitating and perpetuating psycho-emotional or psychosocial issues will need to be explored and addressed' (Baker 2002, pp. 84–5).

LOW MOOD/DEPRESSION AS AN AETIOLOGICAL FEATURE

In addition to the features described in Table 1.3 we have found that patients with psychogenic voice disorders frequently present with lowered mood or mild–moderate

Table 1.3: Common aetiological features of psychogenic voice disorders

Stressful life events and anxiety	Usually either follow an event of acute stress or are associated with stressful events over a long period of time. Anxiety and physical tension is an extremely common symptom. (Butcher et al. 1987; House and Andrews 1988; Kinzl et al. 1988; Freidl et al. 1990; Aronson 1990a; Gerritsma 1991; Roy et al. 1997; Deary et al. 1997; Andersson and Schalen 1998; Baker 1998; Mathieson 2001)
Common to females	More predominantly a female condition; approximately 8:1 females to male. (Aronson et al. 1966; Brodnitz 1969; House and Andrews 1987; Greene and Mathieson 1989; Gerritsma 1991; White et al. 1997; Millar et al. 1999)
Family and interpersonal difficulties	Frequently embroiled in family and interpersonal conflicts and experience difficulties with communication in these relationships. (Butcher et al. 1987; Andersson and Schalen 1998)
Difficulty expressing views and emotions	Person has considerable difficulties with assertiveness and the expression of inner feelings in specific situations. 'Conflict over speaking out' is a common feature. (Butcher et al. 1987; House and Andrews 1988; Kinzl et al. 1988; Freidl et al. 1990; Gerritsma 1991; Austin 1997; Andersson and Schalen 1998)
Suppressing anger and frustration	Being unable to express anger and frustration is the main inner conflict. Person is usually aware of a conflict but is coping by suppressing emotions and therefore not verbalising the anger. (Aronson et al. 1966; Butcher et al. 1987; House and Andrews 1988; Aronson 1990a)
Burden of responsibility	Taking on or trying to cope with above-average personal responsibilities. (Butcher et al. 1987)
Over-commitment and helplessness	Along with a tendency to be over-committed with responsibilities and in their family and social networks, they feel powerless about making personal change or changing the current situation. (Butcher et al. 1987; House and Andrews 1988; Andersson and Schalen 1998)
Near normal psychological adjustment	Not usually individuals who have a serious psychological disturbance. Not more than about 5% with a 'hysterical conversion' disorder. However, may be vulnerable to anxiety symptoms and have a tendency to somatise. (Aronson et al. 1966; House and Andrews 1987; Butcher et al. 1987; Aronson 1990; Gerritsma 1991; White et al. 1997; Millar et al. 1999)