CASE REPORT

Psychosis improved dysphonia

Ruth Ann Murphy, Brian Hallahan

Department of Psychiatry,
University College Hospital,
Galway, Ireland

Correspondence to

Dr Ruth Ann Murphy,
ruthannmurphy1@gmail.com

SUMMARY

We present the case of a 40-year-old single man with a diagnosis of Schizoaffective Disorder since 1989 and a comorbid diagnosis of functional (dissociative) dysphonia since 2011. Although receiving ongoing treatment from a Speech and Language Therapist, the patient's symptoms of dysphonia have remained prominent from the time of diagnosis in 2011 and have been particularly apparent during times of psychosocial and interpersonal stress. He had a dramatic and complete resolution of all dysphonic symptoms during an acute relapse of the psychosis in February 2013 and experienced a gradual re-emergence of dysphonic symptoms when his episode of psychosis resolved. This is the first case report to demonstrate such an association and we discuss potential mechanisms for the resolution of dysphonic symptoms during this psychotic relapse.

BACKGROUND

Given the likely association between the onset of psychotic symptoms and the improvement of dissociative symptoms in this case, it appeared plausible to relate the two phenomena chronologically. A literature review on the comorbidity of psychotic and dissociative disorders revealed little published material on the participant. Also, little information is available that examines the relationship between the course of psychosis or indeed other major psychiatric disorders and the course of dissociative symptoms, including functional dysphonia.

CASE PRESENTATION

We describe the case of a 40-year-old single unemployed ex-smoker with a diagnosis of Schizoaffective disorder. He was initially diagnosed with Bipolar Affective Disorder in 1989. However, owing to the repeated presentation of non-mood congruent psychotic symptoms, this diagnosis was changed to Schizoaffective disorder in 2005. He also has a history of alcohol dependence syndrome and harmful use of psychoactive substances (predominantly cannabis). However, he has been abstinent from alcohol and all psychoactive substances for 11 years. He has had six admissions to the Department of Psychiatry in University College Hospital Galway (UCHG) since his first admission in 1989, lasting between 2 weeks and 3 months. He has been treated with a variety of psychotropic medications. However, since 1992, his treatment has largely consisted of lithium carbonate 1000 mg nocte and risperidone (3–6 mg/day), added in 2005.

With regard to his personal history, the patient is the youngest of nine siblings. There was no history of obstetric complications and he reached all

developmental milestones at appropriate stages. He denied any history of childhood or adolescent trauma, separations or academic concerns and described his childhood as relatively stable and content. The patient is aware of a family history of mental illness. Prior to his birth, the patient's mother required admission to a psychiatric in-patient unit for a period of weeks and, according to the patient, was treated for probable bipolar affective disorder. The patient is unaware of her requiring any further hospitalisations and was unsure what treatment she received. The patient's father also attended mental health services on an outpatient basis and had a diagnosis of an anxiety disorder, but the patient is unsure of the exact anxiety disorder he suffered from. His parents are deceased. The patient is unaware of any mental health difficulties with his siblings. However, the patient did state that there has been a long-standing history of sibling disharmony, which was relatively minor during his childhood but has become more prominent in recent years, and relates this to ongoing familial disagreements over numerous minor issues, and consequently in recent years the patient has had little contact with the majority of his siblings. He describes engagement with his siblings as particularly 'stressful and taxing'.

The patient has always had an interest in music, music production and music performance, and thus, as a component of his rehabilitative plan, he chose to undertake a full-time music course in January 2011. Within 2 months of attending the music course, the patient noticed for the first time a change in the tone of his voice. This first appeared to his knowledge when he was performing (singing and playing the guitar) in a public house with approximately 50 people present to listen to his performance. He noticed a hoarse, periodically high-pitched and tremulous tone of voice. He also had difficulty with the expression, articulation and enunciation of words, in speech and in song, with a significant deterioration in these symptoms when he either engaged in public performance or when he anticipated public performance, although he did get a sense of well-being when performing. These symptoms were more pronounced when under considerable psychosocial or interpersonal stress. Objective evidence of his dysphonia has frequently been noted at outpatient appointments and is more pronounced when he is anxious or when he is distressed at discussing issues related to his psychiatric or social history.

Owing to the presence of these symptoms, he suffered a reduction in his self esteem and confidence, feeling particularly inadequate when performing music in public and consequently sought

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treatment from his general practitioner in August 2011. An interdisciplinary approach to his assessment, diagnosis and treatment was implemented. He was referred to the Otolaryngology Department in UCHG and underwent a full medical work-up including flexible laryngoscopy. No organic cause for his symptoms was attained. He was subsequently diagnosed with functional dysphonia and referred to speech and language therapy, which included regular treatment involving the Alexander technique, a technique which was initially developed to overcome hoarseness and respiratory problems during public speaking. This technique entails developing an awareness of counterproductive levels of muscular tension during everyday activities and releasing unwanted muscular tension built up in the body from accumulated stress and tension by focusing on one's balance, breathing, posture and coordination while performing everyday activities. This brings into consciousness bodily tensions that might have previously gone unnoticed. The patient has good insight into his diagnosis of functional dysphonia and continues to engage regularly in Speech and Language Therapy. Although there has been some amelioration of his symptoms, hoarseness remains evident, particularly during music performance or at times of increased interpersonal or psychosocial stress. Prior to the onset of his dysphonic symptoms, he had engaged for the first time in public performance of his music, which was stressful for him. He also describes ongoing disharmony with a number of family members, with this disharmony being most prominent in 2010 and 2011. He was unaware and there is no documented history of him suffering from dysphonia prior to 2011. In relation to other possible dissociative symptoms, he recalled a brief episode lasting minutes where he lost power in his arms and legs shortly after his first episode of the psychosis. He believed that this was secondary to the distress he was experiencing. He thinks that this may have occurred on one or two other occasions but is unsure of the exact details, as the symptoms were brief in duration. However, they always followed periods of distress. There is no documented evidence of these symptoms and no collateral is available in relation to these symptoms.

The patient suffered a recent relapse of Schizoaffective Disorder in February 2013, with the emergence of a number of psychotic symptoms, including persecutory delusions, grandiose delusions, delusions of reference, somatic passivity, thought insertion and auditory hallucinations. It was noted by himself and the staff, including treating clinicians (BH and RM) and two community mental health nurses, that his dysphonia improved dramatically with no evidence of hoarseness or difficulty with either the articulation or expression of words during this period of relapse.

DIFFERENTIAL DIAGNOSIS

Stuttering.

TREATMENT

During this psychotic relapse, he was treated as an outpatient (with an increased dose of risperidone of 6 mg/day and the introduction of an anxiolytic agent, clonazepam 0.5 mg twice daily). He was reviewed two to three times per week over a period of 4 weeks, at which stage his psychotic symptoms had ameliorated significantly. His anxiolytic was tapered and discontinued and he was reviewed weekly or fortnightly at the outpatient clinic.

OUTCOME AND FOLLOW-UP

On improvement of his psychotic symptoms, a gradual re-emergence of his symptoms of dysphonia was noted by himself and his treating team. His involvement with his music course was minimal during this psychotic episode. However, the emergence of psychotic symptoms (and lack of dysphonia) started when he was still attending the course and abated (with re-emergence of dysphonia) prior to his restarting the music course. Following this recurrence of symptoms of functional dysphonia, he once again attended outpatient appointments with his Speech and Language Therapist in an attempt to return such symptoms to their baseline level prior to his psychotic relapse in early 2013.

DISCUSSION

The patient suffers from a functional dysphonia, which is classified as a dissociative motor disorder F44.4 using the International Classification of Diseases-10 (ICD-10) diagnostic criteria. He also has a background diagnosis of Schizoaffective disorder and during a recent episode of psychosis, his symptoms of dysphonia ameliorated significantly.

Functional dysphonia is defined as the loss of one's voice where there is insufficient structural or neurological pathology to account for the nature and severity of the dysphonia and where the loss of volitional control over phonation seems to be related to psychological processes such as anxiety, depression, quality of life, conversion reaction or personality disorder.¹ Dysphonia or aphonia is one of the more common motor symptoms of conversion disorder² with an estimated annual incidence of 22 cases/100 000.³ It is frequently noted to be a transient phenomenon (albeit not in this case except when the patient was psychotic) and is more common in women. Other factors associated with this conversion disorder include lower socioeconomic class, postinfection, a history of laryngopharyngeal reflux or underlying mucosal disease, fatigue and certain occupational factors (occupations specifically using one's voice) or personality risk factors (anxious, anankastic).³⁻⁴ Functional dysphonia and aphonia are often regarded as disorders on a continuum of severity and are believed to share a common aetiology.⁵ The onset of symptoms can often be traced in close proximity to emotionally or psychologically stressful experiences with psychogenic aetiology established on the basis of three diagnostic criteria, symptom incongruity, symptom reversibility and symptom psychogenicity.⁵ One could hypothesise that the onset of the patient's dysphonic symptoms was in response to an underlying inability to deal with the associated stress and apprehension of performing his music in public. Previously, he developed motor dissociative symptoms (of transient loss of power in his arms and legs) during his first psychotic episode and this was potentially a dissociative defence process involving denial and displacement mechanisms that were primitive and neurotic in origin. However, previous to this first psychotic episode, to our knowledge, there is no history of dissociative processes utilised by the patient as a means of coping with or progressing through highly stressful events in his life. We are unaware of factors that one might associate with patients who regularly use such pathological defence mechanisms during psychosocial stresses. For example, there is no known childhood physical, emotional or sexual abuse, although there is ongoing sibling disharmony.

The patient's dysphonia improved significantly when he suffered a relapse of psychosis and subsequently disimproved again on resolution of this psychotic episode. It is possible that during

such a period of distress associated with the relapse of severe psychotic symptoms, the patient was subconsciously excessively preoccupied with these psychotic symptoms and consequently, subconsciously, he may have been more concerned with his re-emerging psychosis and had little appreciation for his social stress or anxiety, leading to a dramatic but transient resolution of his dysphonia. This is somewhat counter-intuitive as stressful events, such as being psychotic, might be expected to worsen one's dissociative disorder. Indeed, he appears to have had very brief (albeit different) dissociative symptoms subsequent to the emergence of psychotic symptoms previously. Psychodynamic theory to clarify this unusual resolution of dissociative symptoms during a brief psychotic relapse is not easily identified. However, the continuum of dissociative and psychotic symptomatology has been described previously.^{6 7} For example, one hypothesis is that dissociation and psychosis are present on a continuum of illness severity with the central theme of both phenomena involving reality distortion, and dissociation associated with the milder end of the continuum and psychosis associated with the more severe end. Thus, dissociative experiences could be understood as distorting one's current unacceptable reality to a more palatable one, and psychotic symptoms understood as the presence of an entirely distorted and absent reality. It could be argued that the patient's dissociative and psychotic symptoms occur on such a continuum of reality distortion. When distressed due to public performance, he experiences the dissociative symptom dysphonia; however, on occasion, he becomes less able to function and experiences symptoms at the more severe end of the continuum such as persecutory and referential delusions and auditory hallucinations. Theories of dissociative and psychotic experiences presenting on a continuum are often associated with a personal history of severe traumatic experiences, a history that is not present in this case. Therefore, caution is required with this interpretation of his symptomatology.

Until now, there has been minimal investigation examining the possible association of dissociative disorders with the pathogenesis or presentation of psychosis, although available data suggest comorbid rates of 5–30% between major psychiatric disorders and dissociative disorders.^{6–8} Although limited data are available that examine the interplay between the course of psychotic disorders such as schizophrenia or schizo-affective disorder and dissociative disorders, a number of case reports have noted an exacerbation of dissociative symptoms (dissociative identity disorder, dissociative amnesia, dissociative hallucinations) during a relapse of psychosis.^{9–11} Thus, our findings are in contrast with some previous reports. However, the interplay between psychosis and dissociative disorders remains largely unexplored. In relation specifically to functional dysphonia, to our knowledge there are no previous reports detailing either an improvement or exacerbation in dysphonia during a relapse of psychosis. Similarly, we are unaware of any reports demonstrating an association between the course of functional dysphonia and a relapse of any other major psychiatric disorder or indeed any medical disorder.

On the basis of this case report, we believe that functional dysphonia and perhaps other dissociative disorders may not necessarily disimprove during a relapse of major mental illness and as reported here, a relapse of psychosis (or other major psychiatric disorder) may potentially be associated with a reduction or complete resolution of dissociative symptoms, although this may only be a transient phenomenon.

Patient's perspective

The patient was acutely aware of the onset of his dysphonic symptoms in 2011 and promptly sought treatment. He engaged actively with a Speech and Language programme and an improvement in symptoms was noted by the patient and also his treating community mental health team. Most importantly, this improvement allowed the patient to continue to pursue his music performance with limited negative impact from such dysphonic symptoms. The relapse of psychotic symptoms in February 2013 with the subsequent improvement in dysphonic symptoms was noted by the patient, but his main priority at this point was the treatment of his psychotic relapse. Discussing this point with the patient following his recovery from psychosis, he believed that the transient resolution from his dysphonic symptoms was directly associated with his acute and severe psychotic symptoms. However, he was unable to fully articulate his feelings on this point and was unsure as to the exact nature of connection between his psychotic and dysphonic symptoms as, during his relapse of psychosis, he recalls feeling overwhelmed and focused little on this transient resolution of dysphonia. During his psychotic relapse, other than engaging with the multidisciplinary team, he had few social activities and thus was not subject to public scrutiny, performance expectation or significant anxiety; however, he believed that the reduction in his social activities was related to his suffering a psychotic relapse. He did not recall any similar event previously but did note that, since joining the music group in 2011, he had not suffered a psychotic relapse of this severity. On improvement of his psychotic symptoms, unfortunately there was a re-emergence of dysphonic symptoms. The patient stated that he was not discouraged by this, and he believed that the fleeting resolution of dysphonic symptoms was a good long-term prognostic indicator of his dysphonic symptoms and he was inspired to commit to a greater extent with his Speech and Language Therapist, in the belief that he would in the future have a resolution of his symptoms, without an associated relapse of psychosis. Throughout his variable course with his dysphonic symptoms since 2011, he has always been determined, motivated and resolute in his mission to succinctly deal with such symptoms to provide the best quality of life possible, with the aim of continuing his career in the music industry.

Learning points

- ▶ Dissociative disorders may occur as a comorbidity with major psychiatric disorders including psychotic disorders.
- ▶ Relapse of psychotic symptoms may be associated with an improvement in dissociative symptoms.
- ▶ A multidisciplinary approach should be taken in relation to the management of comorbid dissociative symptoms in those with a diagnosis of major psychiatric diagnoses to provide optimum management of both conditions.

Competing interests None.

Patient Consent Obtained.

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