21. Hodgkiss A. From Lesion to Metaphor. Chronic Pain in British, French and German Medical Writings 1800–1914. Amsterdam, Rodopi, 2000.
22. Jowett B. The Dialogues of Plato Translated into English with Analyses and Introductions, 4th ed. Oxford, Clarendon Press, 1953.
23. King H. Once upon a text: Hysteria from Hippocrates. In Gilman S, King H, Porter R, et al (eds): Hysteria in Western Civilization. Berkeley and Los Angeles, University of California Press, 1993, pp 3–90.
24. Landouzy H. Traité Complèt de l'Hystérie. Paris, Baillière, 1846.
25. Littré É. Oeuvres complètes d'Hippocrate: Epidemics, Book 5, Vol. 5, para 64.
26. Littré É. Oeuvres complètes d'Hippocrate: Nature of Women. Paris, Baillière, 1851, Vol. 7, para 3.
27. Louyer-Villermay JB. Recherches Historiques et Médicales sur l'Hypocondrie, Isolée par l'observation et l'analyse, de l'hystérie et de la mélancolie. Paris, Méquignon, 1802.
28. MacDonald M. Witchcraft and Hysteria in Elizabethan London. Edward Jorden and the Mary Glover Case. MacDonald M. (ed. and introduction): London/New York, Tavistock Routledge, 1991.
29. Merskey H. Commentary on histrionic personality disorder: Where should we go with hysteria? In Livesley J (ed): The DSM-IV Personality Disorders. New York, Guilford Publications Inc, 1995, pp 193–200.
30. Merskey H. Conversion, dissociation or doxomorphic disorder. In Halligan PW, Bass C Marshall JC (eds): Contemporary Approaches to the Study of Hysteria: Clinical and Theoretical Perceptions. Oxford, Oxford University Press, 2000, 12:171–183.
31. Merskey H. Pain, psychogenesis and psychiatric diagnosis. Int Rev Psychiatr 12: 90–102, 2000.
32. Merskey H, Potter P. The womb lay still in Ancient Egypt. Br J Psychiatr 154:751–753, 1989.
33. Merskey H, Merskey SJ. Hysteria or the suffocation of the mother. Can Med Assn J 148:(3)399–405, 1993.
34. Merskey H, Spear FG. Pain: Psychologic and Psychiatric Aspects. London, Baillière Tindall, 1967.
35. Micale M. Charcot and the idea of hysteria in the male: Gender, mental science and medical diagnosis in late 19th century France. History of Medicine 34:363–411, 1990.
36. Paget J. Nervous mimicry of organic diseases, Lecture I. Lancet ii 1873, pp 511–513.
37. Paré A. The Collected Works of Ambroise Paré. Trans. Thomas Johnson, London (1634). Pound Ridge, NY, Milford House, 1968, pp 944–945.
38. Piso C (1618). Selectiorum observationum et conciliorum de praeteretis. Leyden, Boutestein and Langerak.
39. Pomme J. Traité des Affections Vaporeuses des Deux Sexes, 2nd ed. Lyon, Benoit Duplain, 1765.
40. Reynolds Sir John Russell. Remarks on paralysis and other disorders of motion and sensation, dependent on idea. British Medical Journal 1869, ii, pp 483–485. Discussion, pp 378–379.
41. Seltzer A. Psychodynamics of spirit possession among the Inuit. Can J Psychiatr 28:52–56, 1983.
42. Sharpe J. The Bewitching of Anne Gunter. A Horrible and True Story of Deception, Witchcraft, Murder and the King of England. New York, Routledge, 1999.
43. Siegel RE. Galen on The Affected Parts. Basel, S Karger, 1976, pp 187–188.
44. Sigerist HE. A History of Medicine. Primitive and Archaic Medicine. New York, Oxford University Press, 1951, Vol. 1.
45. Skey FC. Hysteria: Six Lectures Delivered to the Students of St. Bartholomew's Hospital, 1866. London, Longmans, Green, Reader, Dyer, 1867.
46. Slater E. Diagnosis of hysteria. British Medical Journal i:1395–1399, 1965.
47. Slavney PR. Perspectives on Hysteria. Baltimore, Johns Hopkins University Press, 1990.
48. Sydenham T. Discourse concerning hysterical and hypochondriacal distempers. In: Dr. Sydenham's Complete Method of Curing Almost All Diseases and Description of Their Symptoms. To Which are Now Added Five discourses of the Same Author Concerning Pleurisy, Gout, Hysterical Passion, Dropsy and Rheumatism, 3rd ed. London: Newman & Parker, 1697, p 149.
49. Veith I. Hysteria: The History of a Disease. Chicago, University of Chicago Press, 1965.
50. Walker DP. Unclean Spirits: Possession and Exorcism in France and England in the Late 16th and Early 17th Centuries. London, Scolar Press, 1981.
51. Willis T. The London Practice of Physick. London, Bassett & Crooke, 1685, p 297.

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REHABILITATION OF CONVERSION DISORDERS: A PROGRAMMATIC EXPERIENCE

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DEFINING CONVERSION DISORDERS AND HYSTERIA

Historically, the term "hysteria" has most often been used to describe the occurrence of physical symptoms in the absence of organic disease. Hysteria or conversion disorders are thought to originate in an individual's subconscious and are not regarded as being under voluntary or conscious control. Hysteria is now regarded as an unsatisfactory term and in recent years has been dropped from the American Psychiatric Association's taxonomy of mental disorders.[4] It has since been replaced by the term *somatoform disorder*. Like its predecessor, the term somatoform is used to denote the presence of physical symptoms that suggest a medical condition but cannot fully be accounted for by an underlying organic problem. The most recent edition of the American Psychiatric Association's taxonomy of mental disorders[4] includes a variety of diagnoses under the general category of somatoform disorder. There is considerable overlap between these conditions, which can make differential diagnosis problematic and confusing (Tables 1 and 2).

CHARACTERISTICS OF CONVERSION DISORDER PATIENTS IN REHABILITATION

Conversion disorder patients treated in rehabilitation settings generally present with motor disorders. In our experience, the motor disorder most frequently seen involves paralysis or paresis of one or more limbs. Paralysis is typically not

TABLE 1. DSM-IV Diagnosis Criteria for a Conversion Disorder[4]

A. One or more symptoms or deficits affecting voluntary motor or sensory function that suggest a neurological or other general medical condition.

B. Psychological factors are judged to be associated with the symptom or deficit because the initiation or exacerbation of the symptom or deficit is preceded by conflicts or other stressors.

C. The symptom or deficit is not intentionally produced or feigned (as in factitious disorder or malingering).

D. The symptom or deficit cannot, after appropriate investigation, be fully explained by a general medical condition, or by the direct effects of a substance, or as a culturally sanctioned behaviour or experience.

E. The symptom or deficit is not limited to pain or sexual dysfunction, does not occur exclusively during the course of somatization disorder, and is not better accounted for by another mental disorder.

Subtypes

1. With motor symptom or deficit
2. With sensory symptom or deficit
3. With seizures or convulsions
4. With mixed presentation

complete and usually manifests as hemiparesis, paraparesis, or, less commonly, weakness of a single limb. This is sometimes accompanied by spastic-like features or dystonic-like posturing. Non-organic paralysis or weakness is generally readily diagnosable. It is characterized by simultaneous contraction of agonist and antagonist muscles. Weakness is often ratchet-like in nature with a "give-way" contraction quality. Reflexes are normal or purposely exaggerated. The only situation in which such a diagnosis needs to be made with some care is in the presence of pain in the

TABLE 2. DSM-IV Diagnosis Criteria for Psychological Factors Affecting a General Medical Condition[4]

A. A general medical condition is present.

B. Psychological factors adversely affect the general medical condition in one of the following ways:

1. The factors have influenced the course of the general medical condition as shown by a close temporal association between the psychological factors and the development or exacerbation of, or delayed recovery from, the general medical condition.
2. The factors interfere with the treatment of the general medical condition.
3. The factors constitute additional health risks for the individual.
4. Stress-related physiological responses precipitate or exacerbate symptoms of the general medical condition.

Subtypes

1. **Mental Disorder Affecting a General Medical Condition**. For example, a mental disorder such a major depressive disorder delaying recovery from a myocardial infarction.
2. **Psychological Symptoms Affecting a General Medical Condition**. For example, depressive symptoms delaying recovery from surgery; anxiety exacerbating asthma.
3. **Personality Traits or Coping Style Affecting a General Medical Condition**. For example, pathological denial of the need for surgery in a patient with cancer; hostile, pressured type A behavior contributing to cardiovascular disease.
4. **Maladaptive Health Behaviors Affecting a General Medical Condition**. For example, overeating; lack of exercise; unsafe sex.
5. **Stress-Related Physiological Response Affecting a General Medical Condition**. For example, stress-related exacerbations of ulcer, hypertension, arrhythmia, or tension headache.
6. **Other or Unspecified Psychological Factors Affecting a General Medical Condition**. For example, interpersonal, cultural, or religious factors.

same limb, where pain or the fear of aggravating pain can result in similar features in psychologically "normal" individuals.

After paralysis, the most common presenting motor complaint is astasia-basia, a form of unsteady gait that most resembles ataxia. Merskey[8] defined astasia-basia as unsteadiness of gait often presenting as bizarre incoordination especially in walking or standing still. These patients often stagger and sway acrobatically or shake inappropriately while walking. The coordination and balance required to remain upright in these contorted positions are one way to distinguish astasia-basia from true ataxia. It is not uncommon for these patients to fall into walls or grab onto an unwary passerby, which conveniently prevents a serious fall. Some patients present with both paresis and astasia-basia.

Abnormal movements are sometimes seen apart from astasia-basia. Dystonic posturing and hysterical tremoring are the most common abnormal movements seen. Observing patients when asleep or when they believe they are not being observed may allow discrepancies to be realized. However, there are obvious limitations in that some organic conditions may not manifest while sleeping or resting.

Many of the patients presented with pain as a secondary complaint, although of all symptoms, this complaint was unique in that it generally persisted even once all other symptoms resolved. It is of note that many patients were referred to our rehabilitation program for conversion disorders when the diagnosis was more appropriately chronic pain and some secondary motor signs and symptoms. These are not true conversion disorders, and where the primary complaint is pain, a diagnosis of conversion disorder is, in our experience, usually inaccurate. More common is a chronic pain condition with patients exaggerating some of the physical features in an attempt to convince the observer that they have a physical problem in order to get proper help. Such patients are best treated in a chronic pain program and would be considered inappropriate for our rehabilitation program.

Bladder problems, either incontinence or retention, were present in a not insignificant number of our patients. In our experience, some patients would allow bladder retention of almost 1 L and several required intermittent catheterizations to empty their bladder. Foley indwelling catheters were present in other patients. One patient, remarkably, had an ileo-conduit where her ureters were hooked up to an isolated piece of bowel emptying into a colostomy bag in the absence of any pathology to account for the surgical intervention.

Women outnumbered men in our program by a 4:1 ratio. Most of the patients had complaints that were chronic and had been ongoing for a year or longer. We have now treated some 50 patients on the rehabilitation unit over a 10-year period of time.

DIAGNOSIS OF CONVERSION DISORDERS

Unlike motor disorders originating from an "organic" source, conversion disorders presumably have their roots in the patient's psyche. These maladaptive behaviors mimic organic disorders but without any demonstrable organic causality.[14] The defining criterion was that the signs cannot, after appropriate diagnostic investigations, be fully explained by an underlying organic condition. In addition to "negative" diagnostic findings, patients with conversion disorders display "positive" signs, i.e., clinical signs that are markedly inconsistent with known anatomical pathways and/or physical mechanisms.

In patients admitted to our rehabilitation program, a diagnosis of motor conversion disorder was made based upon the presence of unexplained paralysis or paresis,

astasia-basia, and ataxic-like symptoms with no obvious neurological disorder. In addition, for a diagnosis of conversion disorder to be made, there had to be obvious inconsistencies in physical performance when the patient was being formally observed compared to when the patient thought he or she was not being observed. To be admitted to the program, patients were carefully screened by a physiatrist and had to agree to participate in a rehabilitation program. Even then, once admitted to the rehabilitation program and despite extensive diagnostic testing, five patients with an initial diagnosis of conversion disorders were found to have an organic disorder accounting for their symptoms. These were inevitably rarer conditions such as Huntington's chorea, renal phosphate-wasting osteomalacia with fractures, transverse myelitis, a cerebellar tumor, and lower extremity focal dystonia. It points out the need for thoughtful consideration before making the diagnosis.

REHABILITATION APPROACHES TO CONVERSION DISORDERS

Slater[10] noted that of patients diagnosed with hysteria or conversion disorders, 50% of those studied retained symptoms after 1 year; 30% continued as long as 5 years; and 20% as long as 15 years. Once conversion disorders become chronic, it is less likely that spontaneous resolution will occur. Overall, the general tendency of acute conversion symptoms is toward recovery.[7] In these cases, reassurance that there is no "organic" cause combined with psychotherapy represents the favored treatment approach[1]; it may get to the root of the problem and prevent the problem from becoming chronic, although, again, the prognosis is generally favorable. However, psychotherapy utilizing traditional insight-oriented therapy does not appear to be as successful with chronic hysterical conversion disorders.[2,5] If psychic conflicts are recognized, it is important to explore psychotherapy as a possibility. However, it is our experience that individuals with chronic conversion disorders are generally resistant to psychotherapy (many refuse psychological interventions) while responding positively to alternative approaches.

STANDARD REHABILITATION PROGRAM

A standard rehabilitation treatment approach utilizing behavioral techniques was initially implemented for patients admitted to our program. In the standard rehabilitation treatment approach, positive feedback was provided for successful performance of desired activities. Negative feedback, especially when the individual failed to achieve desired goals, or ignoring undesirable behavior and performance was alternatively provided. The program was structured in such a way that the individual could gradually "recover" in a manner similar to recovery from an organic neurological disorder. Confrontation regarding the psychological origin of symptoms was carefully avoided.

There are a number of published case studies documenting successful treatment of hysterical motor disorders within a rehabilitation setting.[6,11,13] Although the specifics of each intervention varied, they appeared to incorporate the same basic components: (1) interpretation of symptoms as physical but amenable to full recovery; (2) a gradual increase in function through physio and occupational therapies; and (3) praise for improvement in function coupled with an attempt to ignore and withdraw reinforcement for continuing signs of disability.[12] The focus of treatment is on the actual physical manifestation or symptoms.

An important part of these rehabilitation programs is to avoid directly confronting the patient regarding the psychiatric nature of his or her disorder unless the patient initiates the process with psychology staff. This is, in part, due to the observation

that when these patients are confronted with the psychological basis of their disorder, they often display even more symptomatology and disability. It is almost as if hysteric patients accentuate their impairment and disability when confronted with the non-organic nature of their condition in an attempt to "prove" the illness is "real." Sullivan and Buchanan[11] argue that one factor inhibiting resolution of conversion disorders is that spontaneous remission of physical symptoms may lead others to question the legitimacy of these symptoms. Accordingly, by telling patients their disorder is physical and providing a "cure" via gradual rehabilitation, one legitimizes both the problem and its resolution. Confrontation, rather than coaxing patients out of their sick and disabled behavior, may actually drive them deeper into their disability. On the other hand, "face-saving" techniques often provide a successful way out.

Standard rehabilitation settings have generally been more successful in treating chronic motor conversion disorders than psychotherapy. However, chronic cases of conversion disorders are frequently resistant to any treatment. One explanation for this may be the influence of "secondary gains." These secondary gains can appear in two forms: (1) positive reinforcements in the form of support and attention from spouse, friends, relatives, and medical staff; and (2) "time-out" from the stress and responsibilities of daily life. Secondary gains may then maintain symptoms of the conversion disorder[11] despite the absence of any primary gain.

The continuation of conversion symptoms may also persist because of the negative implications for patients should they show a sudden remission of symptoms, in particular that of being perceived as a "faker."[11] This would most likely influence chronic cases in which the families have made considerable sacrifices to accommodate the patient's disability. Sullivan and Buchanan[11] suggest that this may be why psychotherapy and traditional rehabilitation programs have lacked success in treating these patients. In fact, in our rehabilitation program, except for acute conversion disorders (symptoms and signs less than 1 month), the standard rehabilitation approach was uniformly unsuccessful. In those cases, we would then be forced to implement the "strategic-behavioral" rehabilitation approach described below.

Strategic Behavioral Rehabilitation

In our experience, the majority of patients with chronic hysterical motor disorders will not respond to the classical contingency management approach described previously. Particularly difficult patients may exhibit some improvement with this protocol but continue to exhibit pronounced disability. We have found that a strategic-behavioral interventional approach often results in immediate and dramatic improvements in these cases. This approach combines elements of strategic ("double-bind") and behavioral therapy.

The strategic element of this program involved the "double-bind." With the "double-bind," the patient was confronted with two possible casualities for their disorder: (1) a psychological (unconscious) etiology, or (2) an organic etiology. Patients were told by the attending physician (RT) that although staff were pleased with their progress (which was usually minimal), they should be improving much more quickly. They were told that the lack of more substantial and quicker progress could be due to only one of two factors: (1) their problem was psychiatric ("conversion disorder"), had no organic basis, and therefore would only respond to long-term psychiatric treatment; or (2) there was a specific aspect of their physical disorder that required a modification in the treatment plan. However, once this modification was made, progress would be rapid and recovery complete.[9]

Full recovery was then presented as the expected outcome if their disorder was in fact organic. However, failure to recover confirmed a psychological causality, which was presented as the only acceptable alternative. The "double-bind," once presented to the patient, placed him or her in a difficult position whereby the only way he or she could prove they were "sick" was to actually recover and become well! This "double-bind" approach was designed to deal with many of the secondary factors or anxieties about becoming well and did not deal directly with the underlying intrapsychic conflict. It was generally reserved for those patients who are not responding to a standard behavioral approach and who were believed to be psychologically or verbally able to participate in this type of rehabilitation program.

The critical element in this treatment approach is the "double-bind." In essence, patients are told that failure to recover fully and maintain this recovery is conclusive evidence that their problem is psychological. Conversely, full recovery and its maintenance are evidence that the problem is organic. The "double-bind" promises to confer on these symptoms conclusive legitimacy as long as the symptoms disappear with appropriate medical intervention. The "double-bind" indirectly addresses other factors that are likely inhibiting resolution of chronic conversion disorders. These include: (1) the support and caring the disability elicit; (2) freedom from particular responsibilities and expectations of others; and (3) anxiety regarding one's ability to assume said responsibilities or deal with others' expectations given their prolonged avoidance of them through disability. The "double-bind," in effect, leaves patients little choice but to accept the face-saving option of eliminating their symptoms through rehabilitation and confronting the feared consequences of being well. Once the "double-bind" is presented to the family, the only alternative to getting well is to maintain the disability, risk eliciting anger and losing the support of their family, and still be expected to meet those responsibilities or confront whatever fear has been maintaining the disorder. Giving up the disability suddenly becomes the preferred option.

It is the need, conscious or unconscious, on the part of the patient to maintain the appearance of an organically based disorder that makes the "double-bind" approach much more effective. Family and friends' sacrifices and influences obviously play a significant role in this need. By selecting an organic causality for their motor disorder and accepting the "expected" outcomes of continued therapy, that being a full recovery as confirmation of organic causation, patients put themselves in a position where symptom continuation indicates a psychological or even malingering causality. At this point, the patient is left with only two options: (1) continue to maintain their level of dysfunction and confirm the psychological causality (undoubtedly hinted at or expressed outright by previous doctors) for their motor dysfunction, or (2) confirm an organic causality by virtue of recovery. This is the essence of the "double-bind."

Perhaps the most dynamic aspects of the "double-bind" have been its speed and effectiveness even in patients with long-standing conversion disorders. Those patients who showed significant improvement after the "double-bind" was applied were discharged relatively shortly after initial application of the "double-bind." Although some of these patients were discharged with not yet completely "normal" functioning, significant improvements occurred despite prior symptom duration of 2 weeks to 10 years. In most patients who do show a response, we witness a complete recovery. It is interesting to note that the one patient who best met the criteria for Munchausen's syndrome demonstrated significant improvement in the hysterical features with less overall level of health care utilization despite a state of total disability requiring institutionalization of over 8 years' duration.

Although a randomized controlled trial has yet to be performed, it would be difficult to attribute the observed improvement in our patients to factors other than our strategic intervention. The majority of patients presented with chronic symptomatology of greater than 2 years' duration and had already experienced other interventions without benefit. In addition, with about half of our patients we adopted a quasi-experimental, cross-over design by implementing a standard behavioral rehabilitation approach first followed by the strategic-behavioural appproach. Although most of our patients showed minor improvement with the standard rehabilitation approach, they continued to exhibit pronounced disability. In contrast, once we implemented the strategic-behavioral intervention, we immediately observed dramatic improvements in two thirds of intractable patients that were qualitatively different from any improvement that had been observed previously. Specifically, patients would exhibit, for the first time, a more normal gait/posture whereas previous improvement usually was in the form of increased function with concomitant decreases in observed symptomatology. The standard behavioral treatment alone was successful in only eight patients, seven of whom were acute cases. These relatively early cases may well have resolved quite quickly without any programmatic intervention,[9] and improvement may not have been the result of this treatment approach.

ACUTE VERSUS CHRONIC CONVERSION DISORDERS

In our experience of almost 50 patients with a definite diagnosis of a motor conversion disorder who underwent a rehabilitation program, two groups have proven to be quickly discernible based on the length of time the patient had been experiencing symptoms prior to admission.

Acute Conversion Disorders

A minority of patients were admitted with *acute* conversion disorders in which symptoms had onset within a month of rehabilitation admission. The majority of patients responded quickly to a standard behaviorally oriented rehabilitation program, while those in whom the standard rehabilitation approach failed recovered with the strategic behavioral rehab approach. All patients with acute onset conversion disorder recovered with rehabilitation, perhaps reflecting more the generally positive natural history of acute conversion disorders.

Chronic Conversion Disorders

A majority of patients were admitted with more chronic symptoms with signs present for an average of 3 years (range 6 months to 10 years). These patients were initially treated with a standard rehabilitation approach, which was uniformly unsuccessful. Of those patients in whom the standard rehabilitation approach had failed, approximately one quarter were discharged because of other co-morbid psychiatric illness or a lack of English communication skills that would allow the strategic behavioral program to be applied. Over two thirds of the remainder with chronic (greater than 6 months) symptoms experienced complete resolution of symptoms with a strategic-behavioral approach.

PROBLEM PATIENTS

Some of our patients failed to experience a complete recovery or significant improvement. Patients who failed a rehabilitation approach fell into two categories: (1) co-morbid psychiatric disorders (i.e., paranoid schizophrenics) too severe to participate in the program; and (2) patients characterized by three of the following five

factors: different ethno-cultural beliefs, high anxiety, pain behaviors, poor English communication skills, and over-supportive families. Some patients had all five factors.

Finally, it is worth repeating that we are referred many patients with chronic pain as a primary feature and unexplainable secondary symptoms and presentation that lead some clinicians to diagnose a conversion disorder. These are rarely true conversion disorders but more often represent poor coping in the face of unrelenting pain and subsequent physical limitations with perhaps some exaggeration. Paradoxically, pain, despite its subjective nature, is rarely feigned by our conversion disorder patients and is the symptom most resistant (in our cases intractable) to treatment.

THE ROLE OF THE PHYSIATRIST

The physiatrist is in a unique position to contribute to the management of conversion disorders. The rehabilitation approach allows patient a "face-saving" way to recover. The physiatrist must ensure the diagnosis of a conversion disorder is accurate, that organic disease has been ruled out, and the patient is convinced that no organic disorder hinders recovery. Where appropriate tests have not yet been performed, the physiatrist must ensure they are done. A word of caution: The strategic behavioral rehabilitation approach requires a sophisticated and highly flexible team. The psychologist monitors the rehabilitation approach, ensuring that the team stays consistent with the program and dealing with each patient's unique reactions to the rehabilitation program.

CONCLUSIONS

Patients with a clearly delineated conversion disorder were admitted to a special rehabilitation program designed to treat these individuals. Patients with acute conversion disorders (< 1 month) were more likely to respond to a standard rehabilitation behavioral approach and had an excellent prognosis with rehabilitation. Over half of the patients with chronic conversion disorders responded to rehabilitation but only when a strategic behavioral rehab program was instituted. The program is not designed to work with organic disorders complicated by functional overlay.

REFERENCES

1. American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders, 3rd edition. Washington, D.C., APA, 1980.
2. Bird J. The behavioral treatment of hysteria. Br J Psychiatry 1979; 134:129–137.
3. Cardenas DD, Larson J, Egan J. Hysterical paralysis in the upper extremity of chronic pain patients. Arch Phys Med Rehabil 1986; 67:190.
4. Diagnostic and Statistical Manual of Mental Disorders (DSM IV). American Psychiatric Association, Washington, 1994.
5. Dickes RA. Brief therapy of conversion reactions: An in-hospital technique. Am J Psychiatry 1974; 131:584–586.
6. Findlater KA. A behavioral approach to the rehabilitation of long-standing hysterical quadriplegia. Physiotherapy Canada 1986; 38(4): 216–222.
7. Merskey H. The Analysis of Hysteria. London, Ballière Tindall, 1979.
8. Merskey H. The Analysis of Hysteria. London, Royal College of Psychiatrists, 1995.
9. Shapiro AP, Teasell RW. Strategic behavioural intervention in the inpatient rehabilitation of non-organic (factitious/conversion) motor disorders. NeuroRehabilitation 1997; 8(3):183–192.
10. Slater E. Diagnosis of "hysteria." Br Med J i: 1395–1399, 1965.
11. Sullivan MJL, Buchanan DC. The treatment of conversion disorder in a rehabilitation setting. Canad J Rehabil 1989; 2 (3): 175–180.
12. Teasell RW, Shapiro AP. Rehabilitation of chronic motor conversion disorders. Critical Reviews Phys Rehab Medicine 1993; 5(1):1–13.
13. Treischman RB, Stolov WC, Montgomery ED. An approach to the treatment of abnormal ambulation resulting from conversion reaction. Arch Phys Med Rehabil.
14. Wolman B. Handbook of Clinical Psychology. New York, McGraw-Hill, 1965.

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INTERDISCIPLINARY CHALLENGES IN TREATMENT

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Functional disorders resulting in physical symptomatology exist in that gray zone between "real" and "not-real," psychologic and organic, or in "new-age" terminology, at the mind-body interface. Uncertainty is a hallmark of these disorders—uncertainty in assessment, diagnosis, what and how to inform the patient, and, ultimately, uncertainty in treatment.

This uncertainty has led to a great deal of confusion and disagreement in the literature, with somewhat mutually exclusive bodies of literature developing in a number of disciplines. Although functional disorders are seen in all areas of medicine, and by all types of health care providers, efforts at treatment have been more constrained. Kathol[6] described "reassurance therapy," an approach to patients who are concerned by their symptoms who do not have serious disease. This approach includes: (1) question and examine the patient, (2) assure the patient that serious disease is not present, (3) suggest that the symptom(s) will resolve, (4) tell the patient to return to normal activity, (5) consider non-specific treatment, and (6) follow the patient. This approach can be used by any type of provider, with some degree of success. However, patients with persistent symptoms, particularly those with conversion disorder, may be more resistant to this approach.

Conversion disorder has been successfully treated in a number of ways; treatment providers have included psychiatrists, physiatrists, neurologists, and native healers. Patients with conversion disorder have historically been treated in a number of settings, most commonly in an inpatient