

Physical Therapy Strategies for the Patient With Hysterical Motor Paralysis Disorder : A Case Report and Literature Review

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Abstract

It is not common in rehabilitation situation to encounter patients exhibiting paralysis or other disabilities which have no apparent organic basis. Even without organic causes for their signs and symptoms these patients often require comprehensive treatment and management. Patients with conversion disorder often pose particular difficulties because of diagnostic confusion and the lack of therapeutic strategies for rehabilitation management. We feel that systematic functional rehabilitation is helpful in resolving symptom and recovering normal function in the patient suffering from conversion disorder since it provides motivation and reduces reinforcements which contribute to sustained disabled state. This report describes the patient with hysterical motor paralysis who is successfully treated with structured physical therapy. The objectives of this report are to provide therapeutic guidelines for physical therapy and to emphasize the role of physical therapist in the assessment and treatment of hysterical paralysis.

Key Words: Hysterical motor paralysis; Physical therapy; Therapeutic guidelines.

Introduction

Hysterical paralysis involves a nonorganic loss of motor or sensory function that cannot be explained by a physical disorder, but resembles the symptoms of a structural disease of the nervous system (Letonoff et al, 2002). The symptoms are not under the patient's voluntary control and cannot be explained by a pathophysiological mechanism.

It is uncommon for physical therapists to encounter patients exhibiting paralysis or other disabilities which have no apparent organic basis. Even without an organic basis for their signs and symptoms these patients often require comprehensive assessment, treatment and

rehabilitation (Binzer et al, 1997; Heruti et al, 2002; Parobek, 1997). As there are no organic origins which cause the symptoms, confusion can occur during the course of treatment. Chronic conversion disorders can actually produce permanent complications, such as disuse weakness and contractures that can remain long after the psychic strife of the hysteria has been resolved. Physical therapy is crucial in alleviating the symptoms and preventing complications from immobilization (Buschbacher. 1995 Stewart, 1983).

The patients with hysterical motor paralysis often pose particular difficulties because of diagnostic confusion and the absence of therapeutic guidelines for management (Teasell and Shapiro, 1994). The objectives of this paper

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were to report the result of physical therapy to patients who have hysterical motor paralysis, provide guidelines for structured physical therapy and introduce the role of the physical therapist in assessing and treating patients with hysterical motor paralysis.

Clinical Guidelines for Physical Therapy for Patients With Hysterical Motor Paralysis

Specific physical therapy strategies are necessary for reducing the symptoms. Seven physical therapy recommendations based on our clinical experience and literatures are described below.

Avoid labeling the condition

Patients should not be told "There is nothing wrong with you", "You are responsible for your own symptoms", "I don't know what I can do for you" or "It is all in your head." In treating hysterical paralysis, confronting the patient with information that the symptoms are psychological is rarely helpful and may adversely affect relationship with the therapeutic team (Withrington and Wynn-Parry, 1985).

Do not stimulate or facilitate the symptoms

Keep in mind that the symptoms may be the only effective communication or coping strategy for the patient (Silver, 1996). If the symptoms do not improve, the medical team will need to develop a management approach that minimizes reinforcement of the symptoms.

Educate the patient prior to physical therapy

It is appropriate to attempt to alleviate the patient's concern that the extremity is paralyzed,

by telling the patient that all objective tests indicate the brain, spinal cord, nerves and muscles are functioning normally, that the brain has lost the ability to communicate with the nerves and muscles, and this ability is recoverable. It should be explained that appropriate physical therapy can reestablish normal functions of the nerves and muscles. Every element of the physical therapy should be clearly defined and described from the initial treatment phase. 12 Physical therapy program and its rationale and benefit should be explained to the patient and family from the outset by the therapist.

Establish physical therapy plan and program in detail

Physical therapy is based on usual treatment of neurological conditions which the patient has been simulating (Heruti et al, 2002). The goal of physical therapy should be identified separately according to patient's functional ability in detail. The patient should not be allowed to progress to the next step until the previous one has been mastered (Speed, 1996). Copious praise should be given to the patient for mastery of each step and no reinforcement provided for abnormal movement or gait pattern. Emphasis should be on quality, not quantity of ambulation.

Maintain consistency in physical therapy

To maximize therapeutic effect, a designated physical therapist should always be in charge (Trieschmann et al, 1970) and physical therapy should be conducted at the same location. It is preferable to treat the patient in a quiet place away from the main treatment area in order to avoid acquired behavior (Bird, 1979). Walking training should be conducted only during

physical therapy and wheelchair should be used at all other times. The patient should be allowed to walk without wheelchair only when treatment has been successful and is ready to undergo walking training outside the treatment room.

Promote active family participation during physical therapy

Family participation in treatment is essential because most symptoms are originated from psychological conflicts relevant to the family (Ercan et al, 2003). As family inattention can deteriorate symptoms, the family should be directed to focus only on normal behavior of the patient and to disregard any abnormalities. Family participation is also required in home treatment program after discharge.

Use home treatment program for symptoms management after discharge

Home program includes simple exercises and activities of daily living. The program should be within the limits of the patient ability and designed to facilitate self-tracking. The ultimate goal is to move the patient back into community. As the patient's condition becomes normal, local community activities should be included in home program.

Case Report

Case description

This patient was a 12-year-old boy who displayed weakness in all four limbs and lethargy and was admitted to the rehabilitation unit. His symptoms began four months before the admission. The patient had previously visited

numerous hospitals and held strong distrust towards medical staff due to lack of appropriate treatment. At the time of admission, we presumed the symptom to be myasthenia gravis or motor neuron disease but electromyogram findings showed no abnormalities. Brain and spinal magnetic resonance image tests were also normal.

The patient's family and medical history revealed no irregularities. Psychosocial history showed that he was an above average student. His parents were not well educated but had strong ambitions about their son. Counseling sessions with rehabilitation psychologist found the patient having negative inclinations towards his mother and suffering from depression.

Functional assessment

During physical examination, the patient showed inconsistent function, performing worse in the presence of his mother. He exhibited little interest in the physical therapy procedure and had difficulty maintaining attention. He had inconsistent give-way weakness in upper limb muscle groups with no voluntary movement in his lower limbs. Reflexes were normal and symmetric. He sat in a slouched position with poor trunk balance and was non-ambulatory. He required maximal assistance with all activities, and the functional independent measure (FIM) score was 59.

Physical therapy procedures and outcomes

His parents were introduced to the physical therapy process prior to initiation. They understood their role and the importance of physical therapy and tried to assist as recommended by the medical staff. The patient underwent two physical therapy sessions a day.

Physical therapy objectives were established which included normalization of trunk balance, transfer, and eventually, progressive ambulation with assistive devices. The goals and intensity of treatment were increased gradually only in the presence of a physical therapist. Complaints of weakness and lethargy were ignored. Reward and praise were given for achievements. During the first week, he was extremely resistant to treatment and the symptoms continued. He made no improvements in motor function. We determined that he was receiving reinforcement for his symptom from family and friends through visits and phone calls. Once this problem was identified, all visits and phone calls were restricted except as rewards for achieving daily goals. With this new controlled strategy, his motivation and performance improved significantly.

From the second week of treatment, thoracolumbosacral orthosis and long leg braces were used to support the trunk and lower limbs. Treatment stages were designed to maintain seated position, and stand, walk with and without orthoses. The first phase of maintaining seated position and moving while seated was accomplished with ease. The patient appeared extremely uncomfortable when putting on braces and sometimes refused to wear them. But he was only allowed to remove the braces when he reacted positively to treatment and when he was able to stand and perform ambulatory movements. It took two weeks to reach the stage where he could stand without braces. At the end of the third week, he was capable of weight shifting and taking several steps without assistive device. He did not complete the final phase but was able to walk 50 meters with a walker by the time of discharge. FIM score was 105. The patient was assigned to a home exercise program

and his parents were provided with assistance guidelines. Both the patient and his parents took part in counseling to learn more about functional communication methods and to gain insight on resolving conflict.

One month after discharge, the patient was able to ambulate independently without aids and also be independent in all activities of daily living.

Discussion

Hysterical motor paralysis is relatively common, with some studies suggesting a lifetime prevalence of up to 33 % (Farley et al, 1968). The symptoms are seen in both men and women but are most common in young women (Bofelli, 1992). Often there is inconsistency between deficits elicited from functional testing and those found in formal examination since the symptoms tend to correspond to the patient's own idea of physical illness. When there is an apparent discrepancy between objective findings and clinical presentation, it is important to consider the possibility of disability incurring from psychological mechanism at the earliest contact (Heruti et al, 2002).

Hysterical motor paralysis can be sustained by behavioral factors such as secondary gains. As in this report, attention should be given to controlling secondary gains which reinforce abnormal symptoms when the patient failed to respond to treatment. The objective of physical therapy for patient with hysterical motor paralysis is reducing unwanted behaviors and reinforcing the more appropriate behaviors. In order to achieve these objectives it is important to reward the more desired behaviors (Silver, 1996).

Hysterical motor paralysis is similar to organic disabilities in that it affects the occupational and social aspects of the patient's life (Vatine et al, 1996). The symptoms of a patient have to be treated as if their origin is organic (Withrington and Wynn-Parry, 1985). In the past hysterical motor paralysis used to be treated by psychiatrists using psychotherapy or psychoanalysis aimed to gain insight on conflict and need. But this trend has changed, and due to the functional loss patients are referred to rehabilitation units (Stewart, 1983) Treatment of hysterical motor paralysis is well suited to the rehabilitation setting because of the potential for successful environment control, and because of the experience of the multidisciplinary team in treating analogous organic conditions with similar types of functional losses (Findlater, 1986; Sullivan and Buchanan, 1989). Although most symptoms remit spontaneously, resolution can be facilitated by insight-oriented, supportive, or intensive physical therapy combined with the behavioral modification and psychotherapeutic approaches (Slator and Glithero, 1965).

The physical therapist can assist the physician in making the diagnosis by performing various tests, such as manual muscle tests and nerve conduction studies and facilitate the patient's return to normal physical function. By structuring the treatment based on understanding that a patient suffering from hysterical paralysis is not consciously aware that the problem is psychogenic in origin, the treatment goal can be achieved.

Mat exercises should be avoided unless required and treatment should be activities-oriented. Exercises may be problem-related, but more often they aim to steer attention away from the area of disability (Brazier and Venning,

1997). Tilt table, hydrotherapy, sling, balance board, and therapeutic ball can all be helpful in restoring functional ability. Balance exercises using unstable support compel the patient to use his leg power and trunk balance to prevent himself from toppling over. Increasing the difficulty of the balance exercises can encourage the patient to use his legs more.

The clear definition of treatment is crucial for increasing the efficacy of treatment. This is particularly true with patients who exhibit inappropriate walking pattern. In this report the physical therapy program was divided into 5 phases and assistive devices were deployed to reduce inappropriate behavior of the patient and induce positive reaction. But caution must be practiced as the use of assistive devices can reinforce the patient's behavior, dependency and sick role when organic disorders cannot be identified (Klein et al, 1985).

Hysterical motor paralysis often fails to be diagnosed and can be overlooked. This is especially true when the symptom concurs with organic disorders. One difficulty in dealing with patients suffering from hysterical motor paralysis is that evaluating the presence of organic symptoms and treating them can reinforce the symptom (Buschbacher, 1995). Therefore, the physical therapist must be aware that treatment can have significant affect on the patient and carefully map out an appropriate treatment program.

Conclusion

Early diagnosis and treatment can significantly reduce the rehabilitation process and time. The important features in managing these cases were

definitive electrodiagnosis, demonstration of these normal findings to the patient, and the intensive, optimistic approach to physical rehabilitation. We feel that physical therapy is successful in promoting symptom resolution and helpful in aiding patients restore normal function since it provides motivation and reduces reinforcements which contribute to sustained disabled state.

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