

The treatment of contractures of the hand using self-hypnosis

The successful treatment of a man with severe posttraumatic contractures of the hand using a combined psychological and physical rehabilitation approach is reported. The contractures had functional and organic components, as did the treatment, which involved teaching the patient self-hypnosis exercises and the use of a splint. The patient obtained virtually complete return of movement after 3½ years of total disability. The importance of identifying and mobilizing rather than challenging the patient's motivation for recovery using a rehabilitation approach is discussed. Hypnosis can facilitate recovery in such psychosomatic disorders in patients with the requisite hypnotic capacity and motivation.

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This is a case report on the use of a restructuring technique involving self-hypnosis in the treatment of a 43-year-old workman suffering with contractures of the fingers of the left hand. The contractures occurred subsequent to a work-related injury and had physical and psychological components. The resolution of the problem involved negotiating the complexities of the workman's compensation system, several lawsuits, and treatment by a variety of surgeons, psychologists, and psychiatrists. The use of self-hypnosis was particularly effective in this case, both because the patient proved to be hypnotizable and because the treatment was structured in such a way that the patient was given control over his progress and a sense of mastery and pride in the outcome, an approach which contrasted sharply with many of his previous psychological treatments, including one with hypnosis. The treatment was carried out by the authors, a psychiatrist and a surgeon, conjointly, with attention paid to the mixture of psychological and physical components in the disability which had lasted 3½ years. The treatment led to virtually complete recovery of the patient's left hand.

Literature review

Previous reports of the use of hypnosis in the treatment of conversion symptoms describe abreaction of earlier stressful events or conflicts which may have been psychologically linked to the symptom in the unconscious.¹⁻⁴ Crasilneck and Hall⁵ emphasize the im-

Table I. Range of motion three years after injury

<i>Wrist:</i>		<i>Left/right</i>			
Extension		40/60			
Flexion		35/55			
Radial deviation		5/15			
Ulnar deviation		5/35			
<i>Thumb:</i>	<i>Extension</i>	<i>Flexion</i>	<i>Range</i>	<i>Difference</i>	
MP	165/180	135/135	30/45	-15	
IP	165/180	120/110	45/70	-25	
<i>Index:</i>					
MP	150/180	150/105	0/75	-75	
PIP	105/180	100/100	5/80	-75	
DIP	105/180	105/105	0/75	-75	
<i>Long:</i>					
MP	145/180	120/105	25/75	-50	
PIP	120/180	100/100	20/80	-60	
DIP	135/180	115/105	20/75	-55	
<i>Ring:</i>					
MP	155/180	110/105	45/75	-30	
PIP	140/180	100/100	30/80	-30	
DIP	150/180	130/105	20/75	-55	
<i>Little:</i>					
MP	165/180	105/100	60/80	-20	
PIP	155/180	105/100	50/75	-25	
DIP	155/180	130/105	25/75	-50	

Legend: DIP, distal interphalangeal; MP, metacarpophalangeal; PIP, proximal interphalangeal.

portance of recognizing the symbolic meaning of the symptom and making appropriate adjustments in the patient's life so as to make the symptom unnecessary. They illustrate this with two cases in which the symptom represented guilt over stolen money. The therapy involved having the patient make restitution of the misappropriated funds, which, along with the hypnosis, led to alleviation of the symptom. Weiser⁶ reports on a rehabilitative approach in which hypnosis was combined with physical therapy exercises with good results. Spiegel and Spiegel⁷ report a two-pronged approach to

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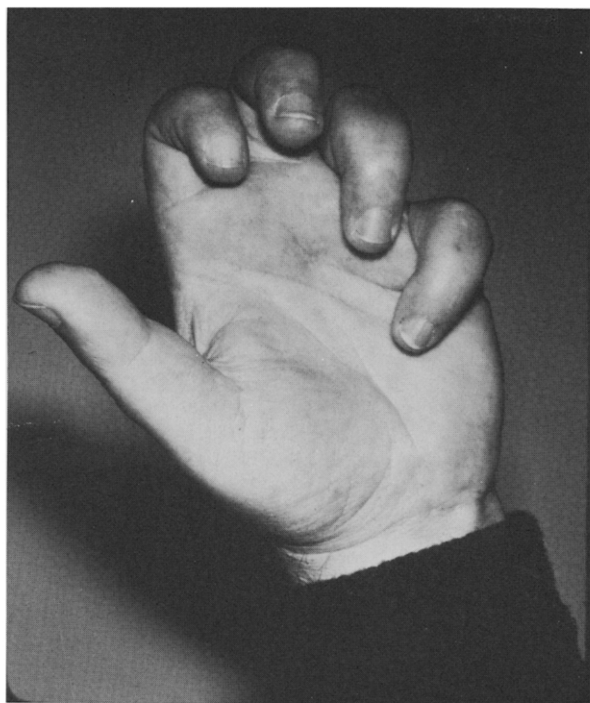


Fig. 1. Patient H.G.'s left hand was in a posture of maximum extension 3 years after a crush injury of the index finger at the level of the distal phalanx. Full flexion was possible, but extension could not be achieved either passively or actively.

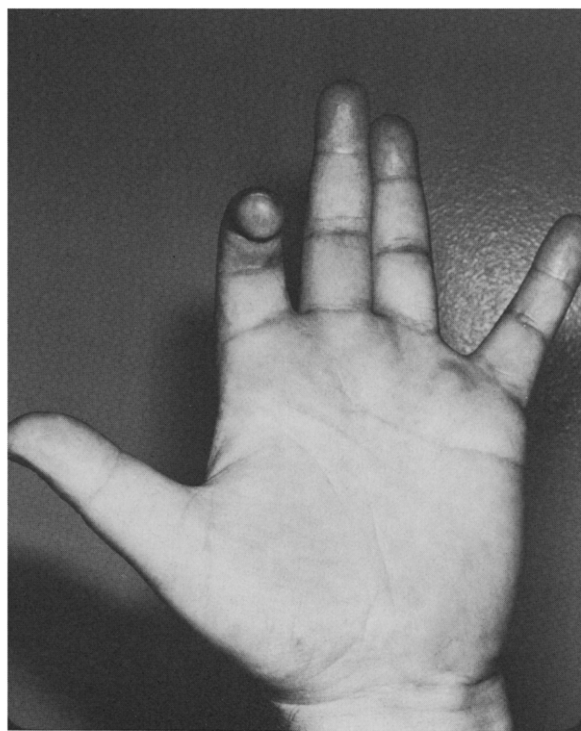


Fig. 2. Patient H. G.'s hand 9 months after treatment with reinforced self-hypnosis exercises, producing nearly full extension, except for the index finger.

the treatment of conversion symptoms involving teaching self-hypnosis exercises aimed at developing movement gradually in the immobile limb, while at the same time exploring the meaning of the symptom in the patient's current social network. As two patients recovered motor function, they also made changes in their stressful marriages. The symptom was treated as a signal that some adjustment was necessary in an important relationship, rather than as a sign of earlier trauma or unconscious conflict. The trend in the recent literature has been toward a rehabilitative approach emphasizing the use of self-hypnosis and an interpersonal interpretation of the symptom as a signal that help is needed in adjusting a relationship, rather than as a sign of earlier trauma or unconscious conflict. In the following case a similar rehabilitative and interpersonal approach was employed. This approach was especially suitable, since this patient's disability had both physical and psychological components.

Case example

H. G., 43-year-old brick mason with 20 years of consistent work experience, suffered an open crush injury to the distal phalanx of the left (minor) index finger while working with a defective ladder. Just prior to the injury, the company for whom H. G. worked had removed two newer ladders with

which he was working. The patient felt that in any event he should have been using scaffolding, according to standard safety procedures. The old ladder which he was given collapsed on his hand, resulting in the injury. After initial treatment of the fracture he developed a fixed flexion deformity of the index finger of the left hand and then flexion deformities of the other fingers of that hand along with symptoms of anxiety and depression. The muscle wasting in his left arm resulted in a 2 cm diminution of the circumference of the left arm as compared with the right arm at 10 cm above the lateral upper condyle, and a 2.5 cm diminution in the forearm. Limitations of motion 3 years after the injury are summarized in Table I and indicated a marked limitation of range of motion in all of the fingers of the left hand, but most notably the index and long fingers (Fig. 1).

H. G. could not return to work and became involved in a series of lawsuits against his employer and the manufacturer of the ladder. While he did receive workman's compensation, his standard of living declined notably. He was angry at his employer, feeling that the employer had subjected him to unsafe working conditions that resulted in his injury and the loss of his ability to work, which had given him a sense of accomplishment and pride. During the course of the litigation and his rehabilitation, he was seen by several psychologists and psychiatrists. Because of the compensation issues involved, the patient had been secretly filmed, and evidence was cited in the psychiatric records of his apparently making

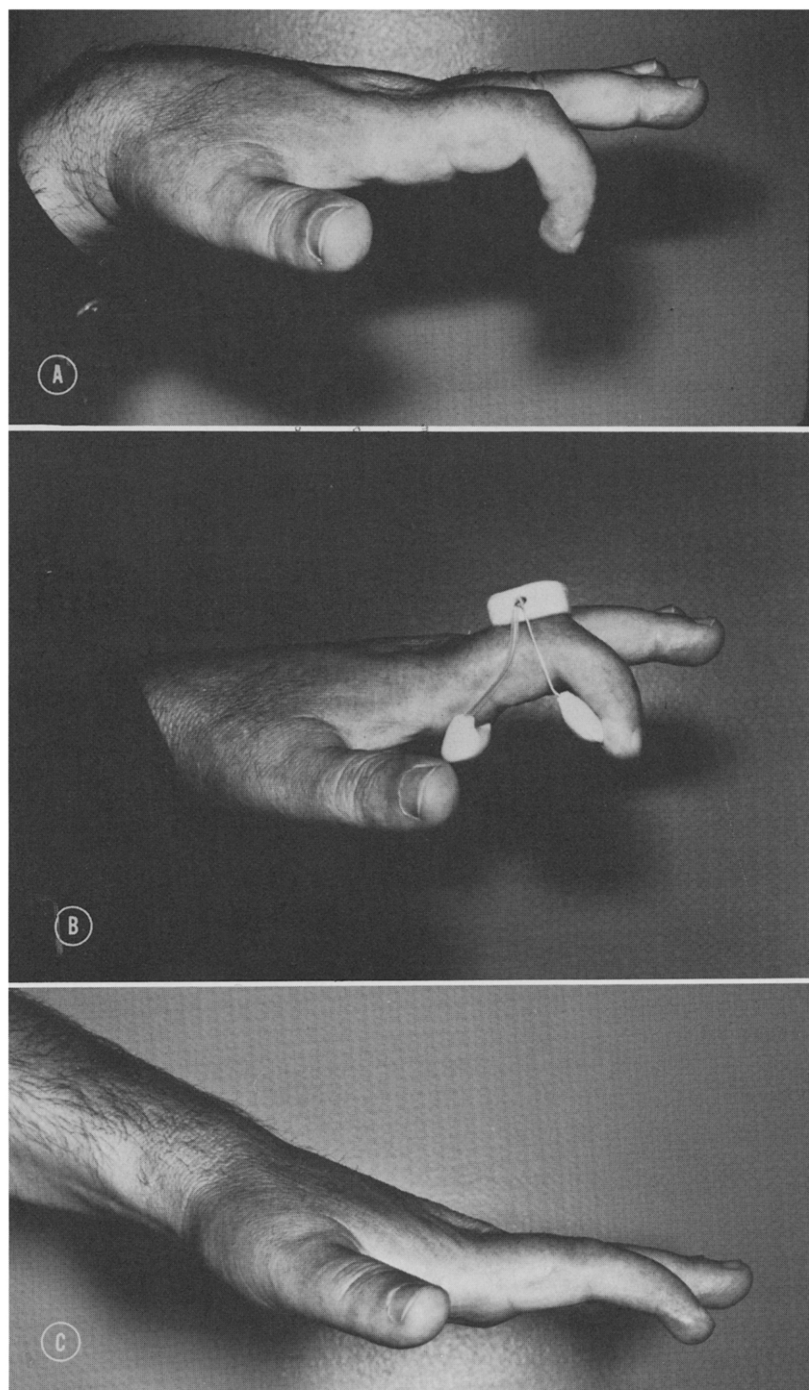


Fig. 3. Patient H. G.: **A**, residual flexion contracture of the index finger; **B**, A dynamic interphalangeal extension splint; **C**, after 3 months of dynamic splinting.

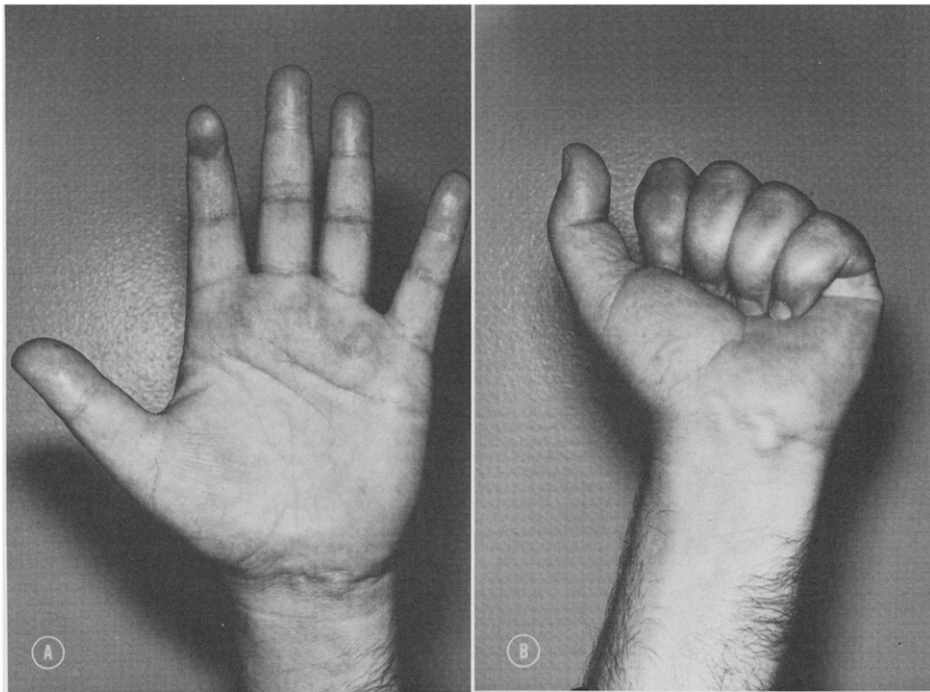


Fig. 4. In patient H. G., after 1 year of combined treatment with self-hypnosis and dynamic splinting, the range of motion had returned to nearly normal in all fingers.

some use of the left hand. One psychiatrist, having viewed the film, told the patient he was a malingerer. This enraged the patient, who considered the accusation an attack on his integrity. He became increasingly depressed and anxious, with weight loss, difficulty in concentrating, sleep disturbance, and social withdrawal. Amputation of the index finger of his left hand was recommended, but the patient refused this. He saw a psychologist who specialized in hypnosis who attempted to use the trance state to make the patient express his anger at his employer. This attempt failed. There was no improvement in the patient's range of motion and the psychologist concluded that treatment, which had been started 2 years after the injury, had begun too late to reverse the process. The patient was caught in a situation in which a variety of health professionals had in essence attacked his integrity. To recover physically became the equivalent of admitting the premise of these evaluators that he was deliberately feigning illness. On the other hand, continuing the disability might conceivably lead to amputation of his index finger and to a continued demoralized living situation with reduced income and self-respect.

The patient was referred for further surgical and then psychiatric evaluation. The contracture was treated as a combined physical and psychological symptom. The patient was evaluated for hypnosis using the Hypnotic Induction Profile⁷ and scored a 1-2 soft pattern, indicating a moderate potential for experiencing hypnosis, which was interfered with, possibly, by depression. The patient, however, was highly motivated and he was taught a self-hypnosis exercise which in-

involved putting himself in a trance, letting his hand float up in the air, and developing trembling movements in the hand which would increase gradually. After 5 minutes of holding the hand and arm suspended in the air, trembling movement sensations gradually developed in his forearm, hand, and fingers. As the patient was initially taught the exercise, he was instructed to flex the elbow so that his left arm and hand could rest comfortably in the air. Interestingly, the patient spontaneously altered the exercise. He held the affected hand straight out in the air as he practiced self-hypnosis twice a day for periods which lasted as long as 30 minutes. He was seen every 3 to 4 weeks over a 9-month period for reinforcement of the self-hypnosis exercise. For additional exercise, the patient began squeezing a rubber ball with such vigor that he developed a hematoma at the metacarpophalangeal joint and was urged to exercise more gently. First flexion, and then both flexion and extension improved steadily to essentially full range of movement in all the fingers of his left hand, with the exception of the index finger (Fig. 2). The patient was exhilarated and reported improvement in his depression and anxiety. At this point splinting was instituted to release the contracture of his left index finger, which improved to a nearly normal range of motion (Figs. 3 and 4). The patient began the procedures necessary for taking out an independent contractor's license.

Discussion

In retrospect, it seems that this treatment was successful primarily because it identified and made use of

the patient's own capacity and motivation for change, transcending the adversary relationships which had been established between the patient and a variety of health professionals. His high motivation, evidenced by his diligent use of the self-hypnosis exercises and his translation of them into a form which was both psychologically and physically taxing, was recognized and utilized rather than questioned. Hypnosis was used not to challenge the "reality" of his contractures, but rather as a rehabilitative device to enable the patient to master his disability. In this sense the patient emerged from the treatment with a sense of accomplishment rather than one of defeat.

In this case as in many others involving workman's compensation litigation, there was a mixture of physical and psychological disabilities. The initial setting of the injury and the ensuing management of it served to increase both aspects of the disability and to subject the patient to a series of indignities. In the short run, the attitude of suspiciousness, evidenced by secret filming of the patient's activities, may seem to protect the compensation system from abuse. In this case certainly, and undoubtedly in many others, such a system can serve to so humiliate and enrage patients that it perpetuates the use of the compensation system and reinforces disability. At the least, as this case demonstrates, it is worthwhile expending every effort to identify motivation and

to offer the patient a methodology which enhances his sense of control and mastery over his disability. In this sense, employing the framework of rehabilitation using self-hypnosis can be far more therapeutic than a fruitless inquest into causation. It was only when the treatment took into account the patient's wounded pride that psychological and physical rehabilitation was possible.

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