Hypnosis in the Treatment of Psychosomatic Symptoms and Pain

By DAVID SPIEGEL, M.D.

The fact that the phenomenon of hypnosis occurs at the mind-brain interface, demonstrating extensive psychological control over both psychological and physical states, makes it an especially useful therapeutic tool. Hypnotic responsivity is in fact measured by testing an individual's capacity to produce alterations in a variety of somatic functions under guided conditions.

The standard hypnotic changes assessed in hypnotizability measurements include an alteration of sensation, such as a sense of lightness or heaviness in a hand; a sense of tingling numbness or warmth in an extremity; alteration in motor function such as the levitation of a hand, especially with a sense of lessened control in hand which is instructed to move, alterations in memory that is instructed amnesia to a given series of events, alterations in time sense such as the capacity to regress the past and relive it as though it were the present.

These standard hypnotic phenomena have t
ous analogs in psychosomatic pathology, for exam-
stocking glove anesthesia, central pain hearing and
disturbances, muscle weakness, conversion para-
fugue states, and other hysterical dissociations. The
try to produce these "artificial symptoms" using
nosis in the hypnotizable patient makes hypnosis a
ey vehicle for reversing such problems when they
er spontaneously.

However, treatment of chronic psychosomatic
blems is quite different. Often far too much emphasis
ed on a dissection of the psychological from the
at etiology. Very often patients suffer from a
plex combination of physical and psychological
ility. Even in the most obviously physically disabling
es, such as multiple sclerosis, the psychological
tive component to the disability plays an important
 overall adjustment. A tremor may become worse
xiety, or the patient's secondary gain from the
ical illness may make the difference between being
chair-bound and being ambulatory.

In the other hand, there are some classic hysterical
version symptoms which may have comparatively
al physical components or which may begin with
ical trauma which then heals leaving a residual
logically-based physical dysfunction. Once the
assy initial diagnostic evaluation has been done and
ailable preventive and therapeutic physical measures
een taken, it is rarely useful to pursue an inquest
ication. Whatever their reason, patients with
osomatic problems are suffering, and they usually
it to the implication that the problem is "in your mind"
 accusation of malingering, which makes them more
e and makes their rehabilitation more difficult.
ablishes a context wherein recovering from the
urbane is an admission of guilt and a humiliating one.

For example, a 43-year-old bricklayer suffered a
ppond fracture of his left index finger while handling
fective ladder on the job. The injury healed poorly,
ing him with a fixed flexion contracture of all of the
ngers of his left hand and making his return to work
ossible. He was given disability by his employer's
urance company, which sent him to a variety of
ncians to examine the fixed contracture in his hand.
e of the physicians he went to informed him that he was
lingenger, which enraged the patient who was already
et at losing his prized job and at living on
proximately one quarter of the income he had
viously earned. The insurance company began secretly
ining him to prove that he could use his hand, and
tly insisted that he have this index finger amputated so
that he could rehabilitate the rest of the hand. He sought
help from a psychologist using hypnosis. The psychologist
determined that the clenched hand represented his
ymbolic rage at the company which employed him and
therefore devoted a number of sessions with the patient to
 the abreaction of the rage. The symptom was unchanged.

The patient then sought surgical evaluation, and the
urgeon informed him that he had contractures of the
and with considerable muscle wasting in the forearm but
at a surgical approach to the problem would probably
ot be beneficial. The patient referred was for psychiatric
evaluation. The patient was moderately hypnotizable and
responded to an approach which was rehabilitative in
ature. He was told that there was no use in exploring
why his hand was the way it was, that he could learn a
 means of rehabilitating the hand if he was interested. He
readily assented. He was then instructed to enter a self-
hypnotic state and to develop restless, trembling move-
ents in his left hand and forearm. He sat for half an hour
with his hand shaking outstretched in front of him and the
sweat pouring off his brow. He went home and practiced
this exercise a half an hour twice a day, and the
contractures began to ease. By the end of nine months he
had complete extension in all of the fingers except the
originally injured index finger, and the surgeon instituted
dynamic splinting. By the end of the year he had regained
full use of his hand and proudly presented his union card
to be signed so he could be removed from disability and
return to work, some four years after the original injury.

In this case, hypnosis was of no use in sorting out the
causation of the injury which obviously had combined
traumatic and psychological features. Rather, it provided
a framework for a face-saving rehabilitative approach
which enabled the patient to acknowledge the possibility
of a psychological and physical role in rehabilitating the
hand, and indeed both somatic and psychological
treatments were involved in his recovery.

The capacity for hypnosis to produce somatosensory
alterations is helpful in the process of convincing the
patient that something can occur which will make a
difference. As soon as the patient sensed the tingling and
tremors in his left hand, he began to believe that he could
overcome the problem. Furthermore, the mystique of
hypnosis provides a patient with a face-saving framework.
He or she has now learned something new that they did
not know before that enables them to overcome the
problem. This removes the tremendous inertia of
conscious and unconscious guilt about previous failures
to recover.

The range of psychosomatic conditions which has been
treated by hypnosis is immense. It includes such primarily
somatic problems as skin disorders, ulcerative colitis, and asthma, and the treatment focuses primarily on intervening with the psychological reactive component to the somatic distress.

**SKIN DISORDERS**

There is a growing amount of experimental literature that demonstrates the effectiveness of hypnosis in controlling a variety of physical functions such as skin temperature and capillary blood flow. While the use of hypnosis in psychosomatic medicine primarily involves intervening with the reactive component, there are situations in which well controlled studies have demonstrated an effect of hypnosis in controlling physical aspects of disease as well. For example, Surman randomly divided patients with warts into treatment and control groups. The treatment group were instructed that they would develop tingling and numbness in the warts and they would fall off on one side of their body. At follow-up, nine of seventeen treatment patients had lost the warts on that side of the body. In fact, eight of the nine, contrary to instructions, lost them on both sides of their body, as contrasted with none of the seven patients in the control group. Likewise, there have been reports that patients with psoriasis have experienced significant relief using hypnosis. They often imagine the climatic conditions which actually improve the disease, such as a warm, dry, desert climate.

**ULCERATIVE COLITIS**

One patient with ulcerative colitis found that at times of renewed bloody diarrhea she became exceedingly anxious and depressed, and her gastroenterologist placed her on increasing doses of steroids, which not only worried her and gave her the typical pattern of side effects but also prevented her becoming pregnant. Despite the active discouragement of her doctor, she undertook training in self-hypnosis and imagined her intestinal mucosa gradually becoming soothed and healed. This, she reported, gave her a sense of control over the course of the illness, which she felt had victimized her in the past. Using this technique she was able to decrease and then discontinue steroids and became pregnant. Even more impressive, her skeptical gastroenterologist asked her to teach him about her self-hypnosis exercises.

**ASTHMA**

There is a large amount of literature on the effectiveness of hypnosis in treating asthma. The generally accepted notion has been that subjective discomfort improves markedly with hypnosis, despite the lack of evidence of differences in airway resistance, although more recent evidence supports the notion that physical parameters altered as well.

One sixteen-year-old asthmatic patient had admitted to the hospital for the third time in as many months as status asthmaticus and was unresponsive to subcutaneous epinephrine. She was taught a hypnotic exercise which simply involved the instruction that she would let her hand float up in the air, and with each breath she would breathe a little deeper, a little easier. She had been sitting bolt upright in her hospital bed in the middle of the night, her knuckles white, audibly wheezing. By the end of minutes of this exercise, while still wheezing, she notably improved, and less tense. She learned to practice the self-hypnosis exercise that involved this instruction, and also imagined herself being in a place where she felt most comfortable to breathe. (Many asthmatics relearn that breathing in cool mountain air or being on the seashore makes them feel instinctively more comfortable.) She practiced this approach every hour and anytime she felt the tightening in her chest. She had one subsequent readmission to the hospital but continued using the hypnosis as a first recourse before using inhalers or other medications. Ten-year follow-up revealed that she had other hospital admissions for asthma, and had been studying to be a respiratory therapist and teaching asthatics how to control their problem.

Hypnosis has an image acquired from Freud experience with it of being the royal road to unconsciousness, of revealing deep hidden secrets. For example, dramatic occasion in which a patient can be regressed to the time of a traumatic incident and have spontaneous remission of symptoms, there are a hundred in which hypnosis is used more to interfere with the secondary anxiety associated with somatic illness and to help patients acquire a sense of mastery.

**CANCER-RELATED SYMPTOMS**

Hypnosis is useful in helping to manage the side effects of certain medications. For example, many cancer patients...
Hospital for the “incurable” did the patient herself become rather frightened about the illness.

She was referred for psychiatric evaluation and was found to be extremely hypnotizable. She was taught first to put herself into a self-hypnotic trance, and then to develop movement sensations which would become a full-blown seizure. This she promptly did. In the past, physicians had been frightened by her seizures. Now the patient was being instructed that she could control them, but indirectly, by demonstrating to her that she could start them. She learned to bring on increasingly milder seizures which gradually became nothing more than a brief closing of the eyes and nodding of the head. Both she and her family were extremely proud of her ability and exhibited no curiosity whatsoever about the etiology of these seizures. Follow-up for the ensuing ten years revealed no recurrence of the seizure or other psychiatric symptoms.

There are many times when patients become trapped by their own symptoms and humiliated by their occurrence. They are looking for an honorable way out, and often simple techniques such as these are all that is required.

Hypnosis has remarkable psychosomatic effects both in normal individuals and in patients. Often it is effective simply by demonstrating the degree of psychological control over the soma. Symptoms which seem frightening are redefined as mere spontaneous trance dissociations, and patients are taught that they have a greater degree of control over somatic reactions than they would have thought. In this way hypnosis can be a useful tool in distinguishing psychological and somatic aspects of illness and redefining the meaning of disability and symptoms to patients, and in teaching them means of controlling them.

Hypnosis often provides a means of translating somatic metaphors as it is likewise a means for expressing them. It is important that the clinician be aware of situational or intrapsychic aspects of a symptom. A two-pronged approach is often useful, in which the patient is supported...
in exploring those aspects of the symptom which are statements of psychological distress while controlling these somatic manifestations. Often when patients overcome the humiliating aspects of being trapped by the symptom, they are more able to examine and explore the psychological significance of it.

CONVERSION SYMPTOMS
Hypnosis can be useful not only in the treatment of conversion symptoms, but also in differential diagnosis. Such hypnotic phenomena seem to be particularly clear illustrations of the mind-brain interface, for example, psychologically produced alterations in sensation of pain or in motor control. It makes sense that the conversion of psychological distress to somatic symptoms should be

Hypnotic responsivity has been used in the differential diagnosis of conversion versus organic symptoms

significantly related to hypnotic capacity and subject to influence via hypnotic experience.

Hypnotic responsivity has been used as a diagnostic probe in the differential diagnosis of conversion versus organic symptoms. The presumption is that the greater psychosomatic flexibility demonstrated by highly hypnotizable individuals renders them relatively more prone to conversion symptoms under duress. Thus, if a patient with a suspicious symptom turns out to be not at all hypnotizable, some therapists are more inclined to look carefully for an organic etiology. One young woman, for example, insisted that her episodes of loss of balance were a conversion symptom related to stress in her life. She proved to be not at all hypnotizable, however, and an extensive neurological workup revealed multiple sclerosis. On the other hand, an extremely hypnotizable patient began to develop hearing loss. However, he was himself suspicious that the hearing loss was related to his depression, and his very curiosity about the possibility of a psychological etiology made it seem less likely that this was in fact a conversion symptom. It turned out that he had middle-ear disease which was surgically corrected with full restoration of his hearing.

There is no doubt, however, that many hypnotizable individuals find themselves employing their hypno capacity as a vehicle to express conflict. One such was who initially sought help for pigmentary glaucoma and elevated intraocular pressure using hypnosis report that she periodically suffered from deafness. Glaucoma was a documented organic disease which became worse when her intraocular pressure went up. These elevations in pressure were related to stress and hypnosis was able to manage the pressure quite effectively and medicated. The deafness, however, seemed more related to conversations with certain individuals were saying things she did not want to hear. She had an example, a sister who insisted that the patient was “not right to be happy.” Once, as the sister was giving these lectures, she found that her hearing began to disappear. She was instructed to enter a self-hypnotic state and to diminish her hearing artificially and restore it upon a signal. When she was able to see easily she could alter her hearing, it was easier for her to accept the hypothesis that her hearing dysfunction was an expression of emotional conflict and to handle it indirectly. She noted, in fact, that she started becoming more assertive with people around her and started expressing anger more openly.

PAIN CONTROL
Given our growing understanding of the complexities in the mind-body interaction and especially of the extent with which psychological factors affect the body, it is surprising that we have been so slow to generally accept and utilize the century-old knowledge that hypnosis be effective in controlling pain. In the middle of the nineteenth century in India, Esdaile reported using hypnosis for surgical anesthesia. Nonetheless, recent medical efforts at pain control have been all too exclusively pharmacological; yet hypnotic techniques be remarkably effective tools in controlling pain.

THE TWO-COMPONENT THEORY OF PAIN
Central to various hypnotic techniques for control of pain is a theory that divides the pain experience into components: the sensation of the painful stimulus itself and the reactive component to it. This distinction was established clinically by Beecher when he observed the experience of pain and demands for pain medication were proportional to the meaning of the pain experience rather than to the extent of tissue damage. Sold wounded on the Anzio beachhead demanded far less medication than a less seriously injured group of surgical patients at Massachusetts General Hospital.

While there is evidence that the use of hypnosis influences the sensation of pain itself, it seems
Physically help patients manage the reactive component of pain. Some have speculated that the mechanism by which hypnotic analgesia works involves the phenomenon of hypnotic amnesia; in essence, the patient forgets the painful experience.29 Others postulate that the phenomenon is related to the intensity of focal attention in the hypnotic trance.21,27 Hypnosis can be understood as aroused attentive focal concentration with inattention constriction of peripheral awareness. By sing on an alternative sensation or metaphor, the hypnotized individual relegates the painful stimuli to the periphery of attention.

NATURAL APPLICATIONS

Hypnosis has been reported to be of help in a variety of medical pain situations, including obstetrics,28,30 cancer,1,34 surgery,35,36 dentistry,37 and migraine headaches.38 Acute and chronic types of pain have been effectively treated using hypnosis. What is most useful at the application of this tool is that recent approaches emphasize teaching patients self-hypnosis rather than insisting on repeated sessions with a therapist. The dual virtue of giving a patient a greater sense of mastery over the painful experience and making patient use of the therapist's time. The artificial sense of confidence on a therapist using hypnosis, which was used by older authoritarian approaches, can be more or less dispensed with.

THERAPEUTIC STRATEGIES

While a wide variety of approaches exist and patients discover by themselves which are the most effective hypnotic metaphors to use in controlling pain, some maneuvers are available. First of all, it is useful to question the patient about what physical remedy provides the most relief. Some patients find that warmth provides relief; others, icy numbness. Some can easily sense a tingling sensation; others find the image of dental anesthesia most vivid.

It is no accident that many of the most effective hypnotic metaphors for controlling pain involve alterations in temperature sensation, since pain and temperature fibers run together in the periphery and through the spinal thalamic tract. Highly hypnotizable individuals are often capable of making the affected part of the body numb. It is sometimes helpful to suggest a sensation of numbness in a more neutral part of the body first, such as the hand or arm, and have the patient transfer this sensation of numbness to the painful area. This alteration sensation is reinforced by emphasizing to the patient: he or she is learning to filter the hurt out of the pain, her than telling the patient not to feel pain, one teaches them to develop a psychological filter through which they experience the pain.

This filter transforms the experience. Mid-range subjects often find temperature alterations helpful, imagining themselves floating in ice water or in a warm bath. One patient undergoing a thoracotomy utilizing hypnosis as the sole anesthesia because of his severely compromised respiratory status reported that he had been "distracted by the penguins in the operating room." Initially the surgical team became worried that the patient had had a psychotic episode, but the patient explained that in order to reinforce the vividness of the sense of icy-cold numbness in his chest, he had imagined himself floating in the antarctic and had pictured penguins walking around on the ice floes. Hypnosis has been defined as believed-in imagination.39 The vividness with which this patient experienced the visual metaphor is a good illustration of this. He was so intensely absorbed in this ice-water image that the pain was relegated to the periphery of his attention. In fact, he asked the surgeon why he had made a pencil line on his chest before starting the operation. What the patient perceived as a pencil line was in fact the incision being made with the scalpel.

Less hypnotizable subjects often find distraction techniques of more use. They can focus on sensations in another part of their body, such as the delicate sensations in their fingertips while rubbing them together. Also, for such patients with chronic pain, it sometimes helps to use an actual physical stimulus to augment the psychological one. Such patients may use a heating pad or an ice pack to reinforce the hypnotic sensation of warmth or cold.

An important part of this hypnotic pain experience is the sense of mastery which it imparts to patients. They have a sense of something to resort to when they experience pain, rather than being helpless victims of it.

These strategies suggested are but a small sample of the available means of employing hypnotic dissociation in the restructuring of the pain experience. One patient with chronic and severe lower back pain employed an image of a spigot in his knee. When he opened the spigot he felt the pain flowing out of his leg as though it were a black viscous substance. The image was so vivid for him that he became convinced that he had left a mess on the therapist's carpet. A female patient with lower back pain found that she could easily develop a sense of tingling in her back, which helped her combat the chronic muscle tension that aggravated her pain. She discovered that daily activity that previously would have left her bedridden was enjoyable and exhilarating rather than demoralizing.

Some individuals are clearly not responsive to this kind of treatment, and it is wise to advise patients taking
analgescics to use the self-hypnosis first and then employ medication as a backup. This is particularly important since most analgesic medications are sedating and sedation hampers hypnotic concentration. Therefore, they are more likely to succeed when they are not suffering from sedative side effects of analgesic drugs.

There has been speculation that hypnotic analgesia is mediated by the endorphin system, and this is certainly plausible. It would make sense that hypnotic analgesia might work via a release of endorphins. The analogy between hypnotic analgesia, selectively helping patients filter out the pain, and opiate analgesia, which likewise seems to help patients ignore painful stimuli, is sufficiently obvious that such a mechanism would make sense. However, several studies have demonstrated no naloxone reversal of hypnotic analgesia, either in laboratory pain or in chronic clinical pain.

**CONCLUSION**

Hypnosis has been demonstrated to be an effective adjunctive tool in the psychological management of a variety of psychosomatic problems. It is useful when the patient is hypnotizable and motivated toward change when secondary gain is not a major obstacle, regardless of the level of insight the patient has about the problem. It is often less important to find out whether a patient has a psychosomatic symptom than to understand the underlying cause.

The experience of hypnosis, with its often surprising demonstration of the patient’s ability to alter perception and motor function, can be used to show patients how to alter physical sensation and function. Understanding this phenomenon sometimes leads to greater insight. The experience of hypnosis often provides a face-saving device, enabling patients to feel better without acknowledging the cause of their relief. By utilizing the hypnotic mode, the patient learning to use the new approach to the problem, which makes the preoccupation with control acceptable. Thus, the intensified concentration, the varied somatosensory alterations in the social communication surrounding hypnosis in a therapeutic setting all contribute to its usefulness in treating a variety of psychosomatic conditions.

**REFERENCES**