

Hypnosis

Brief interventions offer key



to managing pain and anxiety

Hypnosis can help patients safely examine traumatic experiences, then restructure how they think and feel about them.

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Mr. M, a world-class athlete, collapsed suddenly in an alley. He was rushed to a hospital emergency room, where he nearly died of internal bleeding from a grapefruit-sized abdominal lymphoma. He was hospitalized and placed on chemotherapy.

Increasing doses of opiates hardly reduced his pain, and he became extremely anxious. Staff described him as “climbing the walls.” He lay in bed writhing, and his parents feared he was becoming a “drug addict.”

Anxiety about his life-threatening illness was clearly compounding his pain, so his attending physician ordered a psychiatric evaluation. When I interviewed the patient, I felt that hypnosis could help.

Hypnosis—as a state of highly focused attention—can help us treat patients’ anxiety, phobias, pain, posttraumatic stress disorder (PTSD), and dissociative disorders. With training, an experienced psychiatrist can quickly start using hypnosis as an adjunct to other therapies.

This article describes how hypnosis helped



Mr. M and a young woman traumatized by a criminal assault. Based on my experience and the literature, I discuss what hypnosis is, what training is required, how to measure hypnotizability, and the value of hypnosis in helping patients control their anxiety, posttraumatic, and dissociative states.

CASE CONTINUED: 'SURFING' IN HAWAII

When I met Mr. M in the hospital, I acknowledged his distress and the reasons for it, saying "You don't really want to be here, do you?"

"How many years of medical training did it take you to figure that out?" he replied.

"Well then," I said, "let's go somewhere else. Where would you like to be right now?"

He responded, "I've never surfed."

"Good," I replied, "let's go to Hawaii." In hypnosis, I had him picture himself surfing. He continued to groan, but the pattern changed. "What happened?" I asked. "I fell off the surfboard," he replied. "OK, get back on, and do it right," I told him.

He learned to practice self-hypnosis, which markedly reduced his anxiety and pain. Two days later he was off pain medications and joking with the nurses in the hall. The attending physician noted in the patient's record: "Patient off pain meds. Tumor must be regressing."

WHAT IS HYPNOSIS?

Mr. M's response, though unusually strong, underscores the fact that hypnosis can rapidly produce analgesia and anxiolysis in the medical setting. Hypnosis—often called "believed-in imagination"—is characterized by an ability to sustain a state of attentive, receptive, intense focal concentration with diminished peripheral awareness. The hypnotized person is awake and alert, not asleep. Hypnosis' three main components are absorption, dissociation, and suggestibility.

Biological basis. The hypnotic state has no brain "signature" per se, but brain imaging portrays hypnosis as a state of alertness with altered anterior cingulate gyrus activation, which helps to focus attention.^{1,3} Hypnotized persons can demonstrably alter blood flow in brain regions involved in perceptual processing in response to suggestions of altered perception, whether somatosensory, visual, or olfactory.^{4,5} Thus, patients report not only reduced pain but changes in how they experience pain with hypnotic analgesia.

The brain's dopamine neurotransmitter system—especially in the frontal lobes—also may be involved in hypnosis, as highly hypnotizable persons have elevated levels of dopamine metabolites in their cerebrospinal fluid.⁶

In hypnosis, altered anterior cingulate gyrus activation apparently helps to focus attention

Hypnotic trance. The trance experience is often best explained to patients as similar to being absorbed in a good novel. One loses awareness of one's surroundings and enters the imagined world.

When the novel is finished, the reader requires a moment of reorientation to the surrounding world.

A trance is a state of sustained, attentive-receptive concentration in response to a signal from within or from someone else. The signal activates this shift of awareness and permits more-intensive concentration in a designated direction.

All hypnosis is self-hypnosis. Much of its clinical value is that it can be self-induced throughout the day and whenever symptoms emerge. During the first weeks, patients can be encouraged to practice every 1 or 2 hours.

Applying hypnosis to practice. A well-trained clinician can learn to use hypnosis in classes offered by the two professional hypnosis societies or the American Psychiatric Association (*Box 1*). Because hypnosis is not something "done to" a patient but rather a capacity to be measured,

tapped, and utilized, psychiatrists can integrate hypnosis into clinical practice after some initial training, with ongoing learning and supervision.

WHO CAN BE HYPNOTIZED?

Not everyone is equally hypnotizable, and hypnotizability is a stable and measurable trait. Approximately one-quarter of adults cannot respond to hypnotic instructions, whereas 10% are extremely hypnotizable.⁷

Brief, clinically useful tests of hypnotic responsiveness have been developed, such as the Hypnotic Induction Profile (HIP).⁸ The clinician usually can induce the trance experience and systematically measure the patient's response within 5 minutes. A HIP score of ≥ 5 indicates usable hypnotizability.

The HIP test includes instructions to produce a sense of lightness in the left arm and hand, with tests of response to this instruction. Response is characterized by dissociation, hand elevation after it is lowered, involuntariness, response to the cut-off signal, and altered sensation.

Turning hypnotic induction into a test of hypnotic capacity transforms the initial encounter by:

- removing pressure on the clinician to successfully hypnotize the subject
- reducing patients' experiences of complying with the clinician's wishes, rather than exploring and discovering their own hypnotic capacity.

Placing the hypnotic experience in the context of a test also makes it consonant with other medical examinations and procedures.⁸

Once a patient's hypnotizability is determined, structured measurement is no longer necessary. The test-retest correlation for hypnotizability scores is 0.7 over 25 years, which is more consistent than IQ testing.⁷ Subsequent inductions usually can be generated by the patient or signaled by the clinician, and only seconds are required for the shift into trance.

Box 1

Sources of training in hypnosis for psychotherapy

Effective, safe work with hypnosis requires clinical expertise in diagnostic assessment and choosing treatment options. Psychiatrists can learn techniques for inducing, measuring, and using hypnotic responsiveness in introductory and advanced workshops, supplemented by local supervision.

Courses in hypnosis are offered by many medical schools. Postgraduate training is available at annual meetings of the American Psychiatric Association, Society for Clinical and Experimental Hypnosis, and American Society of Clinical Hypnosis. The two hypnosis societies offer intensive workshops for psychiatrists, psychologists, and other health care professionals.

Useful textbooks also are available:

- Spiegel H, Spiegel D. *Trance and treatment: clinical uses of hypnosis*. Washington, DC: American Psychiatric Publishing, 2004.
- Zarren JI, Eimer BN. *Brief cognitive hypnosis: facilitating the change of dysfunctional behavior*. New York: Springer Publishing, 2002.
- Lynn SJ, Kirsch I, Rhue JW. *Casebook of clinical hypnosis*. Washington, DC: American Psychological Association, 1996.
- Fromm E, Kahn SP. *Self-hypnosis: the Chicago paradigm*. New York: Guilford Press, 1990.

REDUCING ANXIETY

Anxiety can be understood as a vaguely defined but immobilizing sense of distress. Lack of clarity about the discomfort's source enhances the patient's sense of helplessness and avoidance. One therapeutic challenge is to convert anxiety



Box 2

'Imagine yourself floating:' Hypnotic instruction for treating anxiety

Imagine yourself floating in a bath, a lake, a hot tub, or just floating in space. With each breath out, let a little more tension out of your body. Just enjoy this pleasant sense of floating, and notice how you can use your store of memories and fantasies to help yourself and your body feel better.

"While you imagine yourself floating, in your mind's eye visualize an imaginary screen: a movie, TV, or computer screen, or, if you wish, a piece of clear blue sky. On that screen project your thoughts, fears, worries, ideas, feelings, or memories, while you maintain the pleasant sense of floating in your body. You establish this clear sense of your body floating here, while you relate to your thoughts and ideas out there.

"Once you have established this screen, divide it in half. Use the left side as your 'worry screen.' Picture one thing that causes you anxiety on this screen and learn to manage the feelings of discomfort that accompany it. Now use the right side as your 'problem-solving' screen. Brainstorm something you can do about the problem on the left, all the while maintaining a sense of floating in your body.

"You may have to 'freeze' what is on the 'worry screen' and re-establish the floating several times. This allows you to develop new means of coping with the things that are making you anxious, one at a time."

into fear—to give it a focus so that something can be done about it.

Anxiety sets up a negative feedback cycle between psychological preoccupation and somatic discomfort, a "snowball effect" in which subjective anxiety and somatic tension reinforce each other. Hypnosis can help reduce anxiety and induce relaxation,⁹ and its dissociative component can help separate anxiety's psychological and somatic components.

Hypnosis is as effective at reducing anxiety as 1 mg of alprazolam, at least in a study of college students.¹⁰ Student volunteers with high and low hypnotizability were given alprazolam, 1 mg, and a hypnotic suggestion based on their reactions to the drug. Four days later, when students received hypnosis only and hypnosis plus alprazolam:

- combination therapy reduced anxiety more effectively than did hypnosis or alprazolam alone, as measured by the Profile of Mood States tension-anxiety scale
- improvement was comparable with hypnosis or alprazolam alone
- highly hypnotizable students showed significantly greater relaxation than did those with low hypnotizability in all three treatment groups
- EEG data showed similar frontal and occipital changes in the alprazolam and hypnotic suggestion groups.

In randomized trials, simple self-hypnosis training has reduced pain and anxiety during medical procedures, reducing procedure time by an average 17 minutes and resulting in fewer complications.¹¹

A typical hypnotic instruction for managing anxiety is provided in *Box 2*. This approach teaches patients how to deal with stressors that complicate their anxiety and to control their somatic response. Hypnosis expands patients' repertoire of responses and enables them to feel less helpless.

CONFRONTING PHOBIAS

Phobic symptoms of fear and avoidance or exposure with distress respond especially well to brief hypnosis interventions. Although behavior modification and antidepressants also can treat phobias successfully, one or two hypnosis sessions often can reduce or cure phobic symptoms.

For example, one can help patients with airplane phobia prepare for flight by going into a hypnotic state and learning three concepts:

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- Think of the airplane as an extension of the body, such as a bicycle.
- Float with the plane.
- Think about the difference between probability and possibility.

The hypnotic state—with its focused attention and physical relaxation—can amplify this cognitive restructuring technique. Phobic patients can feel more in control of their somatic reactions and, by extrapolation, the flying experience itself. In one study, 52% of patients taught this self-hypnosis exercise remained improved or cured at least 7 years later.¹²

TREATING TRAUMATIC REACTIONS

Evidence is growing that trauma elicits dissociation. Thus, hypnosis could help us understand and treat traumatic reactions, including patients with acute and post-traumatic stress disorder (PTSD) and dissociative disorders.

The hypnotic state's controlled dissociation can be used to model the uncontrolled dissociation represented by posttraumatic phenomena such as flashbacks, numbing, and amnesia.¹³ This view is supported by evidence that PTSD is associated with high hypnotizability.^{14,15}

Acute stress disorder—as introduced in DSM-IV¹⁶—is characterized by prominent dissociative symptoms, with intrusion, avoidance, and hyperarousal. These diagnostic criteria recognize that acute dissociation is a common and predictable reaction to trauma.

Hypnosis involving grief work, exploration of trauma-related transference issues, and emotional expression are effective psychotherapies for persons exposed to trauma. Becoming familiar with hypnotic states can teach patients to recognize, understand, and control their dissociative states.

Evidence suggests that hypnosis' intense con-

centration may reverse the dissociative mind fragmentation caused by trauma.¹⁷ Traumatic memories may seem less overwhelming and intrusive once patients discover they can:

- exert greater control over memory access and retrieval
- work through and assimilate disturbing thoughts.

The controlled experience of hypnotic abreaction (reliving traumatic and other memories with strong emotion) provides boundaries for psychotherapeutic grief work.^{18,19} Instead of telling patients not to ruminate over a traumatic event, the clinician instructs the patient how to think about the experience.

The inferred message is that the patient can work on other things—such as relationships and daily living problems—after this therapeutic work is done.

Patients are slowly separated from the victim role. The goal is to help them restructure their memories, both cognitively and emotionally. They bear the memories' impact, yet come to see the information differently.⁷ Traumatic input becomes more bearable when linked to a cognitively restructured recognition

of an adaptive response.²⁰ For example, patients may acknowledge what they did during a traumatic event that was self-protective or helped others.

PTSD. Hypnosis shares common elements with other cognitive and behavioral treatments for PTSD, including exposure to traumatic memories for cognitive and emotional processing. Few studies have examined using hypnosis to treat PTSD, but evidence suggests it is at least as effective as other cognitive-behavioral treatments.^{20,21}

Patients can be taught to view PTSD's intrusive memories and bodily symptoms as re-experiencing painful memories. The memories often intrude less frequently after patients find a con-

Hypnosis' intense concentration may reverse the mind fragmentation caused by trauma



Box 3

Split-screen revelation: 'He wants to kill me'

Ms. J hoped hypnosis could help her better visualize the face of an assailant who had attacked her as she returned at dusk from the grocery store. She had fought off his attempt to drag her into her apartment and rape her. The police showed little interest in pursuing him, however, because the sexual assault had not been completed. After the police left, she had a grand mal seizure. She had suffered a basilar skull fracture.

Ms. J was highly hypnotizable and learned the split-screen technique. While visualizing the assault on the left screen, she realized something that had not been clear to her before: "From the look on his face, I can see he wants to kill me. If he gets me into my apartment, he will kill me."

She focused on this realization and the image of his hatred and threat to her. The therapist asked her to picture on the right screen something she had done to protect herself. She said: "He is surprised that I am fighting so hard. He doesn't expect me to put up such a fight."

She emerged from hypnosis understanding that she had been in more danger than she realized. Thus, despite the disappointment of having no clearer idea of what he looked like (it was quite dark when he attacked her), she had a restructured perspective about what had occurred.

Before this session, Ms. J had felt guilty that she had gotten herself so seriously injured. Afterward, she could better tolerate the memory of the attack because it was coupled with cognitive awareness that her actions may have saved her life.

trolled method—such as self-hypnosis—to access and work them through.²²

Self-blame. Many trauma victims would rather feel guilty than helpless. They blame themselves inappropriately for events over which they had no control, rather than accept their helplessness.

They misuse hindsight about the trauma to assume the events were predictable and therefore avoidable. They imagine they can replay the events and change the outcome.

Such an approach to trauma can be profoundly demoralizing, leaving victims burdened by needless guilt and shame. Helping them face and bear the feelings associated with traumatic events can free them from efforts to "undo" or take responsibility for the trauma and accept what happened.

Split-screen technique. Using hypnosis with a "split-screen" technique can help patients restructure the memory of trauma. The left screen symbolizes the trauma in condensed form. The right screen helps patients focus on how they tried to master the situation. This grief work allows patients to acknowledge, bear, and put into perspective the humiliation of the experience and their loss of invulnerability, health, or loved ones (*Box 3*).¹⁸

Dissociation. Dissociating during a threatening situation may enable a person to put aside some awareness of the danger and take self-protective action. Persistent dissociation, however, may make it too easy to avoid working through the traumatic experiences later on.²²⁻²⁴

Dissociation makes subsequent exposure to reminders of the trauma more similar to a re-experiencing rather than a controlled remembering of it. This can trigger physiologic stress reactions and lead to or worsen PTSD.²⁵⁻²⁷

Dissociative disorders can be understood as chronic and severe PTSDs.²⁸ Many individuals with dissociative disorders have histories of sexual and physical abuse.²⁹⁻³¹ Clearly, traumatic experiences sensitize survivors to subsequent trauma through conditioned activation of fear circuitry involving the amygdala, hippocampus, and frontal lobes.³²

Hypnosis can be especially helpful—both for diagnosis and therapy.³³ It can assist the controlled recovery of memories, while allowing some images to remain dissociated from cognition

until the patient is ready to deal with them. The patient can turn memories on and off by entering and exiting the hypnotic state and thereby recover and reprocess memories at a tolerable pace.

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Related resources

- ▶ Society for Clinical and Experimental Hypnosis. <http://ijceh.educ.wsu.edu>
 - ▶ American Society of Clinical Hypnosis. www.asch.net
 - ▶ American Psychological Association, Division 30. Society of Psychological Hypnosis. <http://www.apa.org/about/division/div30.html>
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Hypnosis is a useful adjunct for diagnosing and treating anxiety, posttraumatic stress, somatic problems, and dissociation. Training is readily available. The experienced clinician can offer hypnosis as a tool to help patients understand and control their somatic and dissociative symptoms.

BottomLine