

# Hypnosis in the Emergency Department

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Five cases are presented wherein hypnosis was used by the emergency physician either as the primary mode of treatment or as an adjuvant to standard medical care. Common hypnotic phenomena (eg, anesthesia, analgesia), as well as novel effects, are reported. The technique used for trance induction and utilization is briefly outlined, and criteria are set forth for the bedside recognition of hypnotic trance. (*Am J Emerg Med* 1989;7:238-242. © 1989 by W.B. Saunders Company.)

Hypnotic phenomena such as anesthesia and analgesia have long been subjects of scientific study.<sup>1,2</sup> Yet, despite their promised efficacy, direct clinical application of such phenomena to medical emergencies has received only sporadic attention.<sup>3-6</sup> In the few cases that appear in the literature, the hypnotist has often been a consultant and not the emergency physician. Most likely, this paucity of published reports reflects the general belief that hypnosis requires considerable time, a quiet place, and an operator free from distraction. However, the following cases all occurred in the routine course of events in a moderately busy (1,000 patient-visits/mo) urban emergency department (ED). They do not represent a series in sequence, but rather selected cases intended to illustrate conditions in which hypnosis can be useful. In all cases, the author was both emergency physician and hypnotist.

## METHOD

The method for inducing and utilizing hypnotic trance was fundamentally identical in all cases, and is outlined below.

Initially, *rapport* (used here in a technical sense) was established between physician and patient by mir-

roring—as much as possible without being obvious—the patient's behaviors, beliefs, physiology, etc.<sup>7</sup> (In this regard, delivering one's utterances in rhythm with the patient's breathing is especially effective.) The patient's attention was then "unlimbered," that is to say, loosened up, distracted from the chief complaint, and directed to other sensations and awarenesses. For example, reference might have been made to similar past episodes, to the previous night's sleep, to other areas of the body, to the borders of the uncomfortable area, etc. Then, the suggestion: "I wonder if you can [patient's first name] close your eyes and allow yourself to recognize certain other sensations, such as . . . ." Perceptions just outside of consciousness were then catalogued (eg, one's breathing, the sensation of the bedsheets on one's legs, distant sounds, the shifting patterns of light and shade on one's closed eyelids). During this phase, suggestions for rest and a gradually increasing sense of comfort and relaxation, ease, and security were interspersed with increasing frequency.<sup>8</sup> Further absorption was then achieved by means of metaphors and images. In children, for instance, a fantasy of Disneyland or some other favorite place was elaborated. By now, trance had usually begun to develop. Suggestions designed to effect the desired therapeutic outcome were then *embedded* into the context of the ongoing metaphors and images. Often, for example, the "message" was delivered by means of altering the volume and pitch of the hypnotist's voice while pronouncing certain key words, thus underscoring the therapeutic command. At other times, suggestions were carefully insinuated through "isomorphic" metaphors: the boughs of a tree, for example, representing the arms of the patient.<sup>9</sup> Suggestions were thus given indirectly, thereby circumventing the possibility of conscious resistance.

The only consistent direct suggestion was for arousal. This was accomplished by offering that on the count of 10 (or some other designated number) the patient would return, "feeling refreshed and renewed, to the here and NOW."

## Assessment of Trance

Presently, there are no physiologic parameters of trance that can be assessed rapidly and unobtrusively

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at the bedside. Trance is a clinical diagnosis. The recognizable changes that occur regularly as one enters trance are listed in Table 1. In cases 1 and 5, arousal occurred spontaneously upon the achievement of the desired therapeutic result. In all other respects, however, the criteria listed in Table 1 were fully met in the cases presented.

### Informed Consent

Prior to the induction of trance, the meticulous recitation of the risks and benefits of hypnosis was not offered to either patient or parent. In most cases, no notice was given whatsoever, the induction proceeding exactly after the manner outlined above. Rarely, something akin to the following prelude was offered: "Now, as I attend to the medical aspects of your problem, you can be of greatest benefit by learning to relax. And, I wonder if you can, [name], close your eyes and. . . ."

## CASE REPORTS

### Case 1

Walter, a 36-year-old man with a history of recurrent shoulder dislocations, complained of intense pain in the left shoulder following an accident. Physical findings were consistent with an anterior dislocation of the humeral head, without neurapraxia. No medications were administered, despite the patient's report that four previous episodes of the same injury had invariably required "Demerol." Instead, a trance was induced under which were made various unsuccessful attempts at mechanical reduction. At length, two techniques of indirect suggestion were used. First, a metaphor was elaborated wherein a bowling ball was pictured ". . . rolling in comfort and ease into the pocket." Second, an embedded command was used, wherein the key words were marked out by means of selectively altering the hypnotist's tone of voice: ". . . allow me to *shoulder* the responsibility, as you continue to settle *down*, all the way *down*, into the *proper place*." (The indirect suggestion being . . . shoulder . . . down . . . down . . . proper place. . . .) As these suggestions were given the affected extremity was simply supported, without stress or traction. The patient was supine. Approximately 15 seconds after delivery of the embedded command ("lag phase," see Table 1), the shoulder clunked into anatomic position (later confirmed radiographically), and the patient aroused spontaneously.

TABLE 1. Bedside Criteria for Determining Trance-State

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| I. Symmetrical facial flaccidity   |
| II. Altered facial vascularity (usually palor)                           |
| III. Generalized immobility  |
| IV. Responsiveness to prescribed behaviors                               |
| V. Relative absence of nonprescribed behaviors                           |
| VI. Lag phase (usually 15 to 30 seconds) between suggestion and response |

Two weeks later, the patient reported a faster and more comfortable convalescence than on all previous occasions.

### Case 2

Jason, a 7-year-old boy, was brought to the ED with multiple abrasions of the left upper and left lower extremities following a bicycle accident. After physical examination confirmed the absence of other injuries, trance was induced. Levitation and catalepsy of the right upper extremity were elicited and sustained throughout the treatment. A metaphor was then used concerning the "tubular arms and legs" of a bicycle that began brand new and became "scratched and injured." But, it was explained, those tubular limbs were "without feeling, because they *don't need to feel anything*." So their owner could easily "*lift a hand* to have them cleaned *up* in perfect comfort." (Again, the technique of embedded commands.) A profound hemianesthesia of the injured side resulted.

At this juncture, the emergency physician was required to leave the room. The ED nurse thereupon accomplished a thorough cleansing and debridement of multiple partial-thickness abrasions, without disturbing the boy. Hand levitation and catalepsy persisted throughout. Upon the physician's return, the patient was aroused and reported having felt no discomfort whatsoever.

### Case 3

Melissa, a 12-year-old girl, was brought to the ED after a fall. There were no abnormalities other than a scalp laceration, which required suturing. However, the patient adamantly refused any procedure involving a needle. It was explained to her that a needle would not be necessary, and trance was induced. Melissa was then directed to "fully enjoy watching a comfortable scene from her past . . . Just watch. . . ." Meanwhile, the wound was thoroughly cleansed, debrided, and sutured without the use of local anesthesia. On arousal, the patient reported her amusement at having been able to "watch a movie" while her medical needs were being attended to painlessly.

### Case 4

Randy, a 9-year-old boy with chronic asthma, was brought to the ED complaining of shortness of breath. On introduction to the emergency physician, he blurted, "I don't want a shot!" Physical examination revealed a slightly pale, afebrile child with bilateral expiratory wheezes. He had a history of responding well to subcutaneous epinephrine.

Trance was induced, and epinephrine, 0.25 mL (1:1,000), was administered subcutaneously. The boy was then aroused and given the appropriate dose of an oral theophylline preparation. His clinical condition gradually ameliorated. Approximately 30 minutes later, trance was again induced, and a second injection—this time 0.15 mL Susphrine (epinephrine 1:200 aqueous suspension; Berlex Laboratories, Wayne, NJ)—was administered. On arousal, the patient was told that he had already received two injections and that he would require no more. In disbelief, the boy created an unusual disturbance by repeatedly exclaiming, "I got a shot,

and I didn't even feel it!" The patient was discharged on oral theophylline, his lungs clear to auscultation.

### Case 5

Arthur, an 84-year-old man with a history of paroxysmal atrial fibrillation, arrived in the ED complaining of an irregular heartbeat. He denied chest discomfort or shortness of breath, and noted that the palpitations—the sole symptom—had persisted approximately two hours. Atrial fibrillation was diagnosed by ECG and physical examination. No other abnormalities were noted. Serum electrolytes and arterial blood gases were within normal limits. He was in no distress.

The patient reporting having had a similar episode at another hospital some years earlier. He explained that just before his transfer from that hospital's ED to the medical floor, he had converted spontaneously to normal sinus rhythm (NSR). His subsequent work-up reportedly had been normal.

While awaiting laboratory results, it was decided to try hypnosis. Trance was induced. The patient was then directed to recall all aspects of his condition and circumstances just before his previous conversion to NSR: the bed he was in, how he felt, what he saw and heard, his emotions at that time, the odors of the place, and so on. In addition, a description was given of how unconscious regulatory functions can come under conscious control. For example, "before mentioning it . . . you were probably not aware of the rate of your own rhythmic breathing . . . which you might now . . . consciously . . . begin to slow down. . . ." Embedded suggestions to regulate heart rate were also interspersed as the trance was maintained and deepened. Gradually, the patient's respiratory rate slowed from 18 to 10/min, and his heart rate slowed from 130 to 140/min to 100 to 110/min.

The patient was then instructed to fully experience the completion of his resurrected memory, that is, to relive his own spontaneous conversion to NSR. Several minutes passed. He was then told that *at whatever time seemed most appropriate to him* he would ". . . return to this restful place (ie, trance), and reexperience it fully and completely . . . Whenever you feel the need . . ." (a posthypnotic suggestion).

After some time, the rhythm remained unchanged. The patient was, therefore, aroused. Digoxin (Burroughs Wellcome, Inc, Research Triangle Park, NC), 0.5 mg, was administered intravenously. An hour later there was still no change. A cardiologist was called. While awaiting the arrival of the cardiologist, the patient, in apparent response to the posthypnotic suggestion, relapsed into trance. Moments later, the rhythm converted to NSR. The patient aroused spontaneously as the cardiologist arrived, and reported: "I did it; I went back there and did just what the doctor said to do!"

### DISCUSSION

Five cases are presented, representing a variety of medical conditions, wherein hypnosis was used either as the primary mode of treatment or as an adjuvant to standard medical care.

Case 1 records the hitherto unreported phenomenon of the nonmanipulative reduction, under hypnosis, of an anterior dislocation of the humeral head. This was accomplished—following failed attempts at mechanical reduction—solely by means of *indirect* suggestion during trance. Conceivably, nonmanipulative reduction could also be achieved using *direct* hypnotic suggestion for muscle relaxation. It is not uncommon, after all, for spontaneous reduction to occur in difficult cases merely upon induction of general anesthesia. The suggestion that convalescence is rather more rapid and comfortable following the stated technique than following conventional mechanical methods is certainly worthy of further study.

Case 2 illustrates several important points. First, notwithstanding Charcot's 19th-century pronouncement to the contrary, children can be hypnotized.<sup>5,10</sup> In fact, children make excellent hypnotic subjects, tending to develop profound trance with ease and rapidity.<sup>1</sup> In the ED, the author has induced trance in children as young as 2 years old. Second, classic hypnotic phenomena can be used to achieve therapeutic results. In this case, hemianesthesia, hand levitation, and catalepsy were all used to accomplish painless debridement. The latter two phenomena were induced to provide both a focus for the child's attention and a steady signal that the effects of trance—specifically, anesthesia—were continuing. Hemianesthesia, in addition to its usefulness in the present case, offers numerous other applications in the field of emergency medicine. Third, the physician's constant attention in this case was not required. The exigencies of most EDs would, of course, preclude any such constancy. Fortunately, Erickson and Rossi have provided specific advice on how to allow for the operator's intermittent absence during trance: advice any emergency physician would do well to study before attempting hypnosis in the ED.<sup>11</sup>

Hypnosis is, among other things, a means by which one can direct the consciousness of another. In case 3, the consciousness of a 12-year-old girl was directed to operate exclusively in the visual mode ("Just watch"). Operations ordinarily perceived in the kinesthetic mode (ie, feelings) thereby remained unconscious. Notice that in this case anesthesia was secured, in a sense, by distraction, whereas in case 2, anesthesia was secured by specific, albeit *indirect*, suggestions ("don't need to feel anything").

In case 4, a 9-year-old asthmatic boy made his "needle phobia" known in no uncertain terms, and squared off for conflict. Using the technique outlined above, however, rapport was quickly established between patient and physician. Trance was then induced; the only suggestions offered were for comfort and relaxation. Obviously, the outcome was happy for all concerned.

Case 5 illustrates the usefulness of posthypnotic suggestion. The patient was offered the illusion of choice; he could choose *when* to reexperience in trance the precise moment of his previous conversion from atrial fibrillation to NSR. That such a conversion *would* occur was presupposed. The posthypnotic suggestion was structured so that “. . . at whatever time seems appropriate . . .” or “. . . whenever you feel the need . . .,” the trance would recur, and the meticulously developed image would proceed to completion.

Confounding factors in case 5 (eg, the prior administration of Digoxin) make it difficult to designate precisely the cause of this patient’s conversion from atrial fibrillation to NSR. Certainly the temporal sequence of events, as well as the patient’s own insistent affirmation, suggests that hypnosis may have played a role. Wain et al have cited cases in which similar effects have been observed.<sup>12</sup> In fact, a growing body of literature exists on the application of hypnosis to functions previously regarded as “autonomic.”<sup>13</sup> However, absolute clarification of the role of hypnosis in the treatment of cardiac arrhythmias must await further study.

These five cases, while demonstrating a variety of hypnotic phenomena, all point to the cardinal advantage of hypnosis in clinical medicine: Trance enhances compliance. Whether the physician’s instructions are to relax muscles, ignore feelings, direct attention elsewhere, or regulate so-called autonomic functions, the patient is more likely to comply when hypnotized.

Patients in the ED are peculiarly disposed to trance. Erickson pointed out that confusion is an essential element of many hypnotic inductions.<sup>14</sup> The disturbances that prompt ED visits generally constitute such a storm of confusion that trance is accepted as a safe haven. Moreover, the ambient din of the ED serves to highlight the distinction between “internal” and “external” processes, and so is conducive to trance. The author’s experience with hundreds of patients indicates that trance often can be induced in the time it takes to utter no more than a half-dozen sentences. The usual time required is five to ten minutes—no more than is necessary to cautiously administer, for example, intravenous morphine. Using the method outlined above, the author was able to hypnotize 48 of the first 50 patients in whom trance induction was attempted: The most frequent indications were the need for analgesia, muscle relaxation, and/or anxiety relief. Of the two patients who could not be hypnotized, one was severely burned and screaming, and the other was racked with the pain of renal colic. Subsequent experience has taught that in such cases the prior administration of parenteral analgesics often facilitates trance induction: an important lesson, especially as the beneficial effect of early hypnotic suggestion on burn

wound healing has been demonstrated in clinical studies.<sup>15,16</sup>

It must be understood that the technique of hypnotic trance induction and utilization outlined in this article is skeletal and incomplete. There are a great many unmentioned skills one must first cultivate in order to guide a patient properly through a hypnotic experience. Difficulties do exist, such as abreaction and delayed arousal, and methods to obviate or deal with such difficulties should be studied and practiced. Fortunately, several professional organizations sponsor excellent courses in hypnosis at all levels. Books on hypnotic technique abound.<sup>7,18,19</sup>

Despite the forementioned difficulties, informed consent was not obtained in any of the cases presented, nor was it considered necessary. A fully developed argument in support of this position lies beyond the scope of this article. Nevertheless, it is worth noting that physicians are not required to advise their patients before acting or speaking casually, with only passing regard for the full effects of their words or deeds. However, an ill-turned phrase may dash a dying patient’s last hope or provoke unnecessary fear in a frightened child. When giving an injection to a child, for example, the untrained physician, intending kindness, will say, “Don’t move, this might hurt a little,” predicting a negative outcome; the physician adept at hypnosis, alert to the power of words, will say, “Hold still now and tell me, What *was* the color of your first bicycle?” (distracting to the visual mode).<sup>20</sup> We do not require the untrained physician to state: “I am going to speak rather recklessly now, but before I do, I am obliged to recite the potential risks and benefits of doing so. . . .” How convoluted, then, to even contemplate requiring informed consent before the exercise by physicians of the wise and circumspect use of words and deeds that hypnosis entails. Furthermore, trance is not compulsory; it is an experience offered and accepted moment by moment. Two patients in this series, upon achieving the desired therapeutic outcome, aroused from trance at will. It can be argued that all patients enter trance at will. To interrupt the flow of trance induction (which begins immediately upon meeting the patient) with the recitation of informed consent, and to introduce the prejudicial fears that are often conjured with the mere mention of the word hypnosis, would be, in this author’s view, to preclude a precious and potent form of artistry from the practice of medicine.

## SUMMARY

The cases presented demonstrate the applicability of hypnosis to a broad range of medical conditions. They clearly illustrate that the process of trance induction and utilization can be performed by emergency physi-

cians in the course of their usual business. Hypnosis need not be excessively time-consuming, especially in the ED, where patients are predisposed to trance.

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