Hypnosis in the treatment of acute pain in the emergency department setting

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Summary

Emergency ward physicians are presented daily with patients in pain. Provisions of safe, quick pain control remains one of their major duties. Hypnosis can be used as an effective adjunct or substitute for analgesic medications when these drugs prove to be ineffective or contraindicated. Four such illustrative cases of attempted pain control are presented. The psychological foundations of pain and its assessment are discussed.

The emergency ward physician can obtain facility in hypnotic techniques with only modest training. Hypnosis may then become a valuable tool in helping him provide safe and effective pain management.

KEY WORDS: haematoma, herpes simplex, renal colic, corneal ulcer.

Introduction

'Oh, that God would grant the thing I long for most—to die beneath his hand and be freed from painful suffering' (Job 6:8–9) lamented Job afflicted with a painful dermatitis. His painful suffering was not only the effect of a neurophysiological signal emanating from damaged tissue, but also the result of his subjective interpretation of his particular affliction.

The modern day emergency ward physician is presented daily with individuals whose pain syndrome lead them to similarly excruciating levels of painful suffering. Provision of safe, quick pain control remains one of the physician's major duties.

The emergency ward physician most often relies on pharmacological means of acute pain control. Hypnosis can be used to enhance such medication and also be used as a substitute when these drugs are contraindicated or ineffective. Since the discovery of chemical anaesthesia and the introduction of analgesic polypharmacy hypnotherapy has been sadly neglected.

For the most part, hypnosis for the relief of acute pain syndrome is an easily learned technique; it can

be administered within 15 min providing immediate, safe, and long-lasting amelioration of painful suffering in many of the common disorders presenting to emergency wards in general hospitals. To date, I have experience in using hypnosis for acute pain management associated with orthopaedic injuries, acute burns, corneal abrasions, abdominal distress, headaches, menstrual discomfort, renal calculi, herpetic lesions, muscle spasms, and dental syndromes. The literature reports the use of hypnosis in the management of many pain syndromes, among these sickle cell crises (Zelter, Dash and Holland, 1979), post-myocardial infarction (Kroger, 1977), dysmenorrhea (Cheek and LeCron, 1968), labour (Davidson, 1962) and cancer (Erickson, 1959; Sarcedote, 1970; Sarcedote, 1966; Zelter, 1979).

Using a basic hypnotic paradigm the following cases were among those in which hypnotherapy was attempted for the relief of acute pain.

Case reports

Case 1

A 21-year-old college senior initially presented after a bicycling accident with a large painful haematoma over her hip. During the ensuing week this haematoma was surgically evacuated, and upon return to the emergency ward the patient complained a great deal of pain upon ambulation.

She continually lamented to her boyfriend that she feared she would no longer be able to row for her college crew team and that although the surgeon prescribed some oxycodone for her pain, she did not want to 'put drugs into my body'.

While under hypnotic trance, she was instructed that no permanent malfunction was sustained as a result of her accident, that the pain had served its purpose, and that from now on it would feel as if there was a rubber band wrapped around her hip causing a bit of discomfort, but no real pain.

Upon awakening from trance, the patient reported

no pain, walked without a limp and reported to one of the nurses that it felt like there was 'a rubber band around my waist'. The patient was followed over the next several weeks during which time she remained pain free. Her hypnotic abilities were assessed using the Stanford Scale C. (Weitzenhoffer and Hilgard, 1962). Her performance placed her at the highest level of hypnotizability. The patient was subsequently trained in self-hypnotic techniques which she utilized for future pain control, relaxation and enhanced concentration.

Case 2

A 40-year-old self-employed sculptor presented with a painful corneal abrasion sustained earlier that day while working in his studio. The patient had been under pressure to complete a statue for a rapidly approaching deadline. In an effort to ameliorate the pain, he had consumed a litre of port and was intoxicated upon his presentation to the emergency department.

His eye was examined and treated. It was felt that chemical analgesics would lead to increased sedation.

Hypnosis for pain control using a standard paradigm induction was then attempted. Trance was not induced. The apparent combination of alcohol and pain appeared to so severely limit his concentration ability that he could not obtain a sufficient level of trance for analgesic hypnotherapy to occur. The patient was therefore treated with an oral narcotic preparation.

Case 3

A 23-year-old graduate student presented with severe renal colic. Evaluated earlier that week he had been given 100 mg meperidine (pethidine) tablets and instructed to take one every 4 hr for pain. Upon arriving at the emergency ward he had already taken 200 mg over a 4-hr period without relief. Fifty milligrams of meperidine i.m. brought relief in 15 min. The patient was discharged, only to return in severe pain 2 hr later. A further 50 mg meperidine i.m. gave no relief after 20 min. At this point, the patient was instructed to use all his energy to focus away from the pain and on my voice in the hope of removing the suffering associated with the pain. While in trance it was suggested that the colic would now only seem as if he had a minor itch on his side. Upon awakening from trance he complained of no pain, immediately fell asleep and remained in the emergency ward until he was evaluated by a urologist in the morning.

Case 4

A 28-year-old dietician presented with a painful

oral herpetic lesion. She was concerned that it would lead to some permanent disfigurement of her lip. She had used some viscous lignocaine but would obtain relief for only a 10-min period.

While under trance the patient was instructed that there was no evidence that this lesion would progress or that any permanent disfigurement would result from it. She was instructed that she would still know the lesion was there, but would not feel pain as she talked or ate. When emerging from trance and when asked if it hurt, she interestingly stated, 'I think it does, but it doesn't bother me'. She said this without the previously noticeable slur in her speech. She called the next morning to report no difficulty with dinner that evening nor with sleep.

Her score on the Stanford Scale placed her only in the moderate range of hypnotizability, but nevertheless she has been able to successfully use self-hypnosis to ameliorate the pain associated with recurrences of her oral lesions.

Discussion

Pain management was one of the first medical applications of hypnosis in the early 19th century. One of the most dramatic reports is that of surgeon James Esdaile who performed over 300 major operations with hypnosis as the sole anaesthetic (Esdaile, 1846). With the introduction of ether and chloroform in the 1840s, the use of hypnosis in surgery diminished.

Pain is often equated with the cry of an injured nerve yet closer analysis reveals no clear cut relationship between the objective wound *per se*, and the amount of painful suffering experienced. Beecher's classic World War II observations documented that spontaneous complaints of pain and requests for morphine were less among wounded soldiers than among civilians with roughly equivalent surgical wounds. He attributed the soldiers' diminished painful suffering to the context in which the wounds occurred and the meaning of being wounded under these circumstances. To these men, being wounded meant being evacuated from the battle field, being shipped home, and not dying during the war. Therefore, few of the messages from their wounded flesh were translated into painful suffering (Beecher, 1956). In a similar manner it appears that by using hypnosis, the emergency ward physician may restructure the patient's interpretation of the context and meaning of the neurological messages previously seen as painful.

Whether a given physical injury will be translated into painful suffering is determined in large part by (1) the context; (2) the patient's sense of loss of control; (3) his attention to the pain; (4) his general level of anxiety; and (5) his expectation about how

this injury will interfere with his present lifestyle and future plans.

The above four cases demonstrate how the emergency room physician using hypnosis may address each of these points:

(a) While in trance the context is restructured by pointing out to the patient that pain *per se* is good in that it alerts us that something is injured in their bodies and in need of medical attention. Once this function is performed there is no longer any need for painful suffering to exist.

(b) The physician attempts to address issues of loss of control. These are often voiced by patients after an acute injury. The physician points out the self-limited nature of the injury and offers the patient an honest assessment of the patient's prognosis now that he is receiving proper medical attention.

(c) As part of the hypnotic induction the patient's attention is shifted from the acute injury by guiding his attention to fixation on external objects or suggested mental imagery.

(d) Having a patient sit or lie comfortably with his eyes closed in itself often reduces his level of anxiety. Having a capable physician offering prompt and thorough care also usually leads to diminished anxiety in an injured patient. With less anxiety there is less subjective suffering from pain.

(e) The skill of the physician using hypnosis resides in his ability to assess quickly the emotional response of the injured patient. Given the same injury, different individuals will respond with different emotional responses, such as fears of loss of autonomy, competency, satisfaction, and/or nurturing. Four patients with identical injuries, a crush injury to the dominant hand, illustrate this point. The 21-year-old female who has recently moved out of her parents' house with expectations of becoming independent may be faced with an inability to support herself. Fears of losing her sense of autonomy may be aroused. The ageing professional athlete may experience the loss of his hand as proof of his fading athletic prowess and overall competency. A high-school boy who has recently had his life enriched through his fencing lessons will now suffer the loss of satisfaction inherent in that pursuit. The emotionally insecure, twice-divorced carpenter who has recently remarried may fear the loss of nurturing from his new wife if he is no longer able to provide financial security for her.

Both real and symbolic losses will add to the intensity of painful suffering when encountered in the acute emergency ward setting. The physician can usually readily assess which issues are at work in a given patient during his initial brief interview by directly asking the patient how he feels about the given injury.

The basic neurophysiological mechanisms of hypnosis are poorly understood. The analgesic effect of

hypnosis is not merely a placebo effect which can suppress pain in 20–30% of individuals (Beecher, 1959). Placebos appear to work through the endogenous opiate system and can be blocked by naloxone (Levine, Gordon and Fields, 1978). Hypnosis as a modulator of pain has been shown to not be blocked by this agent (Goldstein and Hilgard, 1975).

The effect of hypnosis on acute pain is not simply an effect of relaxation or anxiety control. The induction of hypnosis does not require relaxation (Banyai and Hilgard, 1976). In hypnotized subjects who were anticipating the reception of a painful stimulus (to which they did not respond to with pain), a rise in heart rate and blood pressure was noted, demonstrating a somewhat less than totally relaxed and symptom-free state (Hilgard, Morton and McDonald, 1975).

Hypnosis is an altered state of consciousness during which an individual is able to exert heightened control over sensory modalities through suggestion and imagination. The hypnotist under this definition is not seen as controlling the patient. He is viewed as an educator and guide of the patient's ability to control his own sensory state, in this case the control of pain.

In general, hypnosis is a safely administered technique of pain control. Contraindications to its use are few. Unless a patient is prepared to enter into trance, no hypnosis will occur. I would advise against using this technique with patients who are grossly paranoid or psychotic, or in those individuals who seem unable to comprehend the basic technique. Only when the patient has a reasonable expectation of the hypnotic process do I then attempt its use. Should patients demonstrate the slightest hesitation I forego the use of hypnosis as part of pain management.

Teaching seminars in hypnosis should be available through most major medical centres. An emergency physician should be able to learn this technique from an experienced teacher in a matter of hours. Facility in the technique of hypnosis usually occurs with a modicum of practice.

Hypnosis should not be thought of as a substitute for more conventional pain management techniques. It is, however, a powerful weapon easily incorporated into the arsenal of the emergency room physician. When time allows, and when relative or absolute contraindications to the use of narcotics or anaesthetic agents exists (pregnancy, allergies, history of narcotic abuse etc.), hypnosis may provide full relief of painful suffering. Should hypnosis be found not to be efficacious the physician and patients are no worse off than before the attempt and the use of pharmacological agents is still possible. The emergency room physician should find hypnosis to be a valuable tool

in helping him provide safe and effective management of pain for his patients.

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