



Hypnoanesthesia in Vascular Access

Steven F. Bierman, MD

Access Scientific, LLC, San Diego, CA

Irma S. Sivieri, BSN, CRNI[®], VA-BC[™]

Vascular Access Department, South Shore Hospital, Weymouth, MA

Abstract

Purpose: A case is presented wherein hypnosis alone provided anesthesia for the ultrasound-guided placement of a device into right basilic vein. This is the first reported case of hypnoanesthesia for ultrasound-guided vascular access.

Method: Ericksonian hypnosis was employed by the operator while a second clinician performed the vascular access procedure. The general method of induction and the anesthetic suggestions are disclosed and discussed.

Results: The patient's experience was painless and, by her own repeated reports, pleasurable.

Conclusions: Hypnosis is merely a refinement of everyday communication wherein ideas are expressed to increase the likelihood of their actualization. This case illustrates how a few carefully chosen sentences can alter a vascular access patient's entire experience.

Keywords: hypnosis, hypnoanalgesia, hypnoanesthesia, suggestion, vascular access

Introduction

The use of hypnosis for reducing or eliminating acute pain during medical procedures is well documented.^{1,2} As early as 1850, Dr James Esdaile performed and catalogued 73 painless surgical procedures, including amputations and scrotal resections, using hypnosis only.³ Subsequently, many other medical applications of hypnoanalgesia and hypnoanesthesia have been reported, including joint and fracture reductions, and wound debridement.^{2,4-9}

To date, however, the use of hypnosis for the performance of ultrasound-guided vascular access procedures has not been documented. Because these kinds of procedures are becoming increasingly common, it seems appropriate to spotlight this simple and effective means of providing patients with anxiety relief and anesthesia—especially because the skill required to effect such outcomes is simple and easy to master.¹⁰

Definitions

Hypnosis is the simple phenomenon whereby ideas evoke responses. The Hypnotic Method is a technique used to enhance the likelihood that an expressed idea will elicit the intended response. Trance is not hypnosis, nor is it a necessary element

of hypnosis. Trance is a hypnotic response, as are hemostasis, muscle relaxation, and pain relief. The placebo effect is a salutary response evoked by a therapeutic idea, expressed or tacit. As such, the placebo effect is a hypnotic response. The nocebo effect is a deleterious response evoked by an idea antithetical to the cure or amelioration of a condition. As such, it too is a hypnotic response.

Case Report

The patient was a chronically ill 33-year-old woman, admitted through the emergency department for pain relief and catheter-directed thrombolysis of a deep vein thrombosis that had resulted from her previous peripherally inserted central catheter. She was polite, yet demonstrably nervous and needle-phobic.

Clinical assessment had determined that treatment would best be accomplished with a power-injectable midline catheter placed in the right basilic vein of the upper arm. During setup for the procedure, the patient proudly revealed that she had recently lost 33 lb. When asked how, she responded: "I joined Weight Watchers and did a little hypnosis, too."

At that moment, the inserter (who was already gowned and gloved) realized that xylocaine had not been brought up to the patient's room. To fetch it now would entail a considerable disruption (ie, degloving, degowning, leaving the field exposed for some time, and obtaining the medication from the dispensing machine). One of the authors, having used hypnosis frequently in clinical settings, asked the inserter to wait a moment, and turning to the patient said, "So then, you are already EXPERIENCE the pleasantness of hypnotic trance,

Correspondence concerning this article should be addressed to sbierman@the-wand.com

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aren't you?" (It seems an ungrammatical sentence, but the mandate to "EXPERIENCE" is actually a simple embedded command that is part of hypnotic technique.) The patient assented. Next, the author offered: "So, I wonder if you can take care of the inside things while we take care of the outside." Synchronizing the next few sentences with the patient's breathing, the clinician said:

For example, you can close your eyes...that's right...and pay attention now to some things you might not have: Like, while your outside was nervous for a while...your inside continues to breathe gently in and out, slow and easy...that's right...and even slower with time... And you might have forgotten to pay attention to the feelings in your shoulders or toes, because you can forget to feel...and yet, thoughts continue. For example, I know patients who were once a bit scared and nervous, and then you actually begin to watch some pleasant memory or image of some comfortable time...and just watch...the shapes and shadows...the movements and patterns...even the beautiful little details... comfortable and just watching."

This went on for a few more carefully selected sentences during which time the patient manifested the hallmark sign of hypnotic trance, namely, a paucity of nonprescribed activities. She complied with all suggestions: her respirations slowed, her muscles visibly relaxed, and her eyes rolled up behind closed eyelids in response to visual suggestions.

In the experience of 1 of the authors (SB), very few suggestions are more effective in inducing anesthesia in properly prepared patients than "you can forget to feel" and "just watch," meaning, do not feel or move or worry or engage in any activity other than watching.

After no more than roughly a dozen sentences, the patient had reached a sufficient depth of anesthesia to proceed.

A 4F, 10-cm, power-injectable midline was then placed without difficulty 2.5 cm deep into the patient's right basilic vein. An extension set was connected and flushed. Securement and overlying transparent dressing were completed. Throughout, the patient remained with eyes closed and breathing regularly, apparently oblivious to the procedure.

While the inserter worked, only the occasional "That's right...even deeper...just comfortable...just watching some pleasant scene," was uttered. Upon completion of the procedure, the patient was instructed to "wake up as if from one of the most pleasant experiences of your life, completely comfortable and relaxed." She did, amazed to see her catheter in place, for she knew how painful and difficult her previous intravenous access procedures had been. She avowed repeatedly that she had felt absolutely nothing during the procedure and was manifestly grateful to all.

The inserter was equally astonished. A highly experienced vascular access nurse, skilled in modified and accelerated Seldinger technique and ultrasound placement of a variety of devices, she could not believe what had just happened before her very eyes.

Hypnotic Method

Once established, all patterns tend to persist; they have, as it were, momentum. For example, recite this series and try not to

think of the next element in the series: "A, B, C, D...." You cannot *not* think of the "E." Patterns, once established, tend to persist.

Hypnotic Method consists in establishing 3 operator-subject patterns—rapport, linkage, and authority—and then communicating ideas in the context of those patterns, to increase their likelihood of actualizing.¹⁰ The patterns that underlie and overarch the Hypnotic Method are rapport (I = you), linkage (my words = your experience), and authority (my reality = your reality).

Details on how to establish and use these patterns with patients are detailed elsewhere.^{11,12} Once one has established hypnotic rapport, linkage, and authority (the latter being a given in the clinician/patient relationship), the key is to communicate so that ambiguity and imprecision are avoided. Hence, a careful understanding of the true meaning of one's words (and of, say, the hypnotic lexicon) is essential.

For example, scores of pediatric patients have been entranced by first establishing rapport (usually by synchronizing with the patient's breathing), then by establishing linkage (often by saying, "you really were scared there, weren't you?"—thus also putting "scared" in the past tense), and finally by uttering: "Now, I wonder if you can try to stay awake for just 1, I mean 2, no 1...more minute?" Here, the word "try" implies an obstruction. The "1, I mean 2, no 1..." is part of a confusion technique: Confusion focuses attention.

Thus, 1 sentence, directly and indirectly, conveys the following meaning: Because we are in rapport, you will tend to do as I do; and because my words in the past have described your experience (linkage), my words in the future are likely to describe your present and future experience; and finally, because my authority defines your reality..." "Try to stay awake for just 1 or 2 minutes," means: by the time 1 or 2 minutes are up, you will not be able to resist sleep. As mentioned, scores of children have been spared pain and anxiety with this simple, but deliberate, application of hypnotic technique.¹³

With good instruction and practice, a clinician can gather a comprehensive understanding of hypnotic technique and of trance management in a very short time. Its benefits, thereafter, accrue over a lifetime.

Discussion

The authors must at the outset affirm that they do not wish to recommend omitting the use of local anesthesia for vascular access procedures. On the contrary, although it was necessary to forgo such anesthesia in the present case (and in cases of allergy) the recommendation is to use local anesthesia in concert with carefully worded suggestions. At times, such suggestions may precede the injection; at other times they may follow it, depending on circumstances.

Hypnosis, as defined above, is a double-edge sword, slicing in the patient's favor when used with careful intent to cure or assist, yet slicing to the patient's detriment when used carelessly or without deliberation. In fact, negative or deleterious hypnotic effects are presently much more common than the salutary effects of hypnosis.¹⁴ A well-intending clinician utters, "a little bee sting," before giving a shot. In response

to that idea, the patient tenses in anticipation of pain, recalls (consciously or unconsciously) the discomfort of a previous envenomation, and thus magnifies his/her own perception of the injection.

One of the authors, an emergency medicine physician, has administered more than 1,100 painless injections using non-trance hypnosis.⁴ Instead of warning patients of forthcoming pain—a self-fulfilling prophecy—the author uses 1 or more distraction techniques to keep the patient’s consciousness in the visual or cognitive/thinking mode, rather than in the kinesthetic/feeling mode.¹⁵ A classic case example follows:

The patient was an 88-year-old woman who had fallen and sustained a deep 4-in long gash to the right side of her forehead. The triage nurse, having assessed the patient’s mental status as unimpaired, set up for a multilayered closure and ordered a hemoglobin/hematocrit level test.

Upon approaching the patient, the author noticed that she was slightly pale (although no longer actively bleeding), breathing regularly, and apparently in a profound state of rest with her eyes closed. Periosteum was visible in the depths of the wound. The author, following hypnotic technique, first synchronized his breathing with the patient’s, and then said: “...that’s right...even deeper...just comfortable.” He then proceeded to establish a sterile field, anesthetize the wound edges with a series of xylocaine injections, explore, cleanse, debride, and close the wound in 3 layers. Throughout the procedure, the patient slept comfortably without the slightest sign of disturbance—except for 1 brief incident.

While suturing the patient, a well-meaning phlebotomist approached on the opposite side. She set up her vials and placed a tourniquet without affecting the patient’s trance. Then, she announced—or rather, suggested: “A little prick.” Upon placing a small needle in the patient’s antecubital vein, this elderly woman—who had just received more than a dozen painless injections into the raw edges of her gaping wound—opened her eyes and let out a bloodcurdling scream. “After which you can discover your eyes closing again and your pleasant dreams returning,” the suturing clinician quickly added. The patient promptly and peacefully relapsed into trance.

Conclusions

Hypnosis consists of delivering ideas in ways that increase the likelihood of their actualization. The authority of the clinician, as opposed to the relative helplessness of the patient, magnifies the effect of a clinician’s words. When those words suggest pain, the patient feels pain. When those words convey comfort, especially when delivered using Hypnotic Method, comfort ensues.

Application of positive hypnotic suggestions, as this case example illustrates, can be a useful addition to the many tools already at the disposal of vascular access specialists.

Disclosure

The authors have no conflicts of interest to disclose.

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