

CLINICAL HYPNOSIS AS AN ADJUNCT IN ANESTHESIA FOR A SURGICAL PROCEDURE

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Abstract

This is a report to share the experience of managing a patient planned for surgical wound procedure under anaesthesia with medical hypnosis as a tool for sedation and pain relief with a wrist block to supplement the analgesic effect. This was a patient who presented with severe preoperative anxiety and pain concerning her second surgical procedure. She developed an allergy to some analgesia from her first surgical procedure. Adequate pre-anaesthesia assessment with the patient enabled issues about her surgical anxiety to be explored and helped to ease the patient's anxiety with preoperative hypnosis. The surgical procedure was successfully done with medical hypnosis and regional anaesthesia. The patient's response towards pain and anxiety was documented based on numerical reporting scale. The patient's wound care in the ward and clinic proved to be less painful and more comfortable for the patient with her self-hypnosis skill. Empowering the patient with medical hypnosis during the procedure is an option that should be explored.

Keywords: Medical Hypnosis, Preoperative Pain, Preoperative Anxiety, Preoperative Hypnosis

Introduction

Wound care procedures can be hurtful and anxiety-cause for some. Patients with unexpected wound trauma are thus at higher risk of running into a variety of psychological reactions, in particular post-traumatic stress disorder. Non-pharmacological intervention is crucial for complete pain and anxiety management and can be considered to be applied with standard pharmacological agents.

Enhancing patient's outcomes by reducing their anxiety and psychological pain with medical hypnosis has proven to be a viable option (1-3). Medical hypnosis can also empower patients to support themselves by learning self-hypnosis and this can enhance patient's active participation in their treatment. The utilization of medical hypnosis in the operating room (OR) and for chronic pain management (4,5) has been reported and proved to be valuable in-patient care.

Here we report, the method of medical hypnosis used as hypno-sedation as an adjunct to anaesthesia for a wound care surgery and the application of same modality during wound care dressing.

Case Report

A 33 year-old lady presented for a surgical procedure involving her right-hand palmar aspect. The diagnosis was a right index finger abscess along the distal palmar crease.

This is the second surgery for this patient within a month. There were pockets of pus that needed to be explored and debrided surgically. The patient received the standard general anaesthesia care for her first surgery with no anaesthesia complications.

During the assessment of the second surgery, the patient expressed her fear and pain following the previous anaesthesia. She said, post-anaesthesia, after regaining full consciousness in the recovery bay, the patient was very drowsy and developed post-operative nausea. The post-operative pain, numerical rating scale (NRS) for pain was 8-9/10, despite having adequate analgesia given based on a multimodal approach. However, in the ward, it was learned that she developed an allergy to several analgesic medications. The patient was apprehensive with second general anaesthesia, and the fear of pain during the previous wound dressing (in the ward and clinic visits) made her anxious. NRS for anxiety was 8/10.

An anaesthetic plan was made for the patient based on her history and physical assessment, considering her anxiety and pain perception. The patient was offered medical hypnosis for relaxation to reduce anxiety and as an adjunct therapy to manage pain together with regional anaesthesia (wrist block). During the surgical procedure, the patient used the hypnosis practice, and she was assured that additional analgesia will be given or converted to general anaesthesia if the patient was distressed with the surgical pain. This was based on the patient's verbal responses and vital sign monitoring. The patient agreed and consented to this anaesthetic plan.

In the ward, the hypnosis script was read to the patient to allow the patient to be familiar with the approach and to be calm. When the patient was confident in eliciting surgical analgesia over the wound site, she was wheeled into the OR. Hypnosis script was read to the patient again in the OR receiving bay and finally, when the patient is on the OR table. NRS for pain and anxiety at all stages was recorded as 0/10.

Wrist block was performed with 10mls of chirocaine 5 mg/ml (levobupivacaine hydrochloride). During the wrist block, the patient was given verbal relaxation hypnosis and imagination of a safe place (refer to scrip explained in the discussion segment). The patient did not retract the hand or reported pain during the needle puncture for the wrist block. Post wrist block procedure, NRS pain was 0/10. The surgical time was 30 min, and the patient was comfortable throughout the surgery. Postoperatively, the patient was able to take orally in the ward within 10 min, as she was alert immediately after the procedure.

The next day, for the wound dressing, the patient was reinforced on the technique of hand numbness hypnotic analgesia (same script as above). The NRS for pain during the wound dressing was 3/10. Compared to previous wound care in the ward (after first surgery), NRS for wound dressing in the ward 8-10 / 10. During clinic follow-ups, the patient reported that, on her daily dressing, she would practice the hypnotic relaxation technique 10 min before the wound dressing. This resulted in the patient being able to tolerate the discomfort from the wound dressing. The ward staff and the attending doctors reported that they were less stressed in managing the patient's pain and anxiety during the wound dressing.

Discussion

Adequate non-pharmacological pain and anxiety control during wound care procedures is an area under-investigated. Techniques of clinical hypnosis during medical and surgical procedures has been published in previous literatures (3,6-8).

Hypnosis method and description:

There are three phases during a hypnosis session, starting with induction, followed by therapeutic suggestions, and concluded by emergence from the hypnotic state.

During the induction phase, the anaesthesiologist (hypnosis provider) helps the patient to relax by imagining a peaceful scene and become more focused on a "daydream." In the second phase, the anaesthesiologist provides the patient with suggestions. These suggestions are to help the patient to be comfortable. For example, the author suggests that, during and/or following hypnosis, she will feel calmer or less bothered by those feelings.

Emergence from hypnosis means helping the patient to get back into a normal state of consciousness. The crucial factor in hypnosis is the use of suggestion. Patients exposed to hypnosis relaxation practises have described various phenomena such as alterations in body image, time distortion, dissociation, feelings of relaxation and peace and increased positive affectivity, but diminished self-awareness and memory (9).

Below is the hypnosis script that is read out to the patient during the pre-anaesthesia visit in the ward, in the operating theatre receiving bay and during the surgery while the patient is on the operating table. This scrip is adapted from Lang EV published papers (3,8).

"We want you to help us to help you to learn a concentration exercise to help you get through the procedure more comfortably. It can be a way to help your body be more comfortable through the procedure and also deal with any discomfort that may come up during the procedure. It is just a form of concentration, like getting so caught up in a movie or a good book that you forget you are watching a movie or reading a book.

Now what I want to do is to show you how you can use your imagination to enter a state of focused attention and physical relaxation. If you hear sounds or noises in the room, just use these to deepen your experience. And use only the suggestions that are helpful for you. There are a lot of ways to relax but here is one simple way:

- a. *On one, I want you to do one thing - look up.*
- b. *On two, do two things, slowly close your eyes and take a deep breath.*
- c. *On three, do three things, breath out, relax your eyes, and let your body float.*

That's good, just imagine your whole body floating, floating through the bed, each breath deeper and easier. Right now, I want you to imagine that you are floating somewhere safe and comfortable, in a lake, a hot tub, or just floating in space, each breath deeper and easier.

Notice how with each breath you let a little more tension out of your body as you let your whole-body float, safe and comfortable, each breath deeper and easier. Good, now with your eyes closed and remaining in this state of concentration please describe for me how your body is feeling right now. Where do you imagine yourself being, what is it like? Can you smell the air? Can you see what is around you? Good, now this is your safe and pleasant place to be and you can use it in a sense to play a trick on

the doctors. Your body has to be here, but you don't. So just spend your time being somewhere you would rather be.

Now, if there is some discomfort, and there may be some with the procedure as they prepare you and clean the affected wound with medical liquids, or as you feel the doctor putting in generous amounts of numbing medications at the wound site, there is no point in fighting it. You can admit it, but then transform that sensation. If you feel some discomfort, you might find it helpful to make that part of your body to feel warmer, as if you were in a bath. Or cooler, if that is more comfortable, as if you had ice or snow on that part of your body. This warmth and coolness become a protective filter between you and the pain.

If you have any discomfort right now imagine that you are applying a hot pack or you are putting snow or ice on it and see what it feels like. Develop the sense of warm or cool tingling numbness to filter the hurt out of the pain.

With each breath, breathe deeper and easier, your body is floating, filter the hurt out of the pain. Now again with your eyes closed and remaining in the state of concentration, describe what you are feeling right now.

(1) If they are at their safe and comfortable place - reinforce it.

What is it like now? What do you see around you? What are you doing?

(2) If they are in pain -

The pain is there but see if you can add coolness, more warmth, or make it lighter or heavier

If no longer in pain: Good continue focus on those sensations

If still in pain: Try to focus on sensations in another part of your body. Now rub your fingertips together and notice all of the delicate sensations in your fingertips and see how much you can observe about what it feels like to rub your thumb and forefingers together. how do you feel now?

If not in pain - Good continue to focus on these sensations

If still in pain - Now imagine yourself being at _____ (patient's safe place) where you said you felt relaxed and comfortable. What is it like now? What is the temperature? What do you see around you?

(3) If they state that they are worried –

Okay, your main job right now is to help your body feel comfortable so we will talk about what is worrying you. But first no matter what we discuss concentrate on your body floating. So, let's get the floating back into your body. Imagine that you are in this favourite spot and when you are ready let me know by nodding your head and then we will talk about what is worrying you. But remember no matter what we discuss concentrate on your body floating,

and feel safe and comfortable. So, what is worrying you? (Discuss)

How do you feel now? If not worried: Good, now continue to concentrate on body floating, and feel safe and comfortable in your favourite place.

If after discussing patient has persistent worry, then - Okay picture in your mind a screen like a movie screen, TV screen or a piece of clear blue sky. First picture a pleasant scene on it. Now picture a large piece of blue screen divided in half. All right, now on the left half, picture what you are worrying about on the screen. Now on the right half, picture what you will do about it, or what you would recommend someone else to do about it. Keep your body floating, and if you are worrying about the outcome, okay admit it to yourself, but your body does not have to get uptight about it. You may, but your body does not have to.

Good, you know that whatever happens there is always something you can do. But for now, just concentrate on keeping your body floating and feeling safe and comfortable.

Sometimes throughout the procedure say - If you feel any sense of discomfort, you are welcome to let me know about it. Try to use the filter to filter the hurt out of the pain, but by all means let me know and I will do what I can to help you with it as well. Whatever you do just keep your body floating and concentrate on being in the place where you feel safe and comfortable.

When finished, say - Okay the procedure is over now. We are going to leave formally this state of concentration by counting backwards from three to one. On three get ready, on two with your eyes closed roll up your eyes, and on one let your eyes open and take a deep breath and let it out. That will be the end of the formal exercise, but when you come out of it you will still have the feeling of comfort that you felt during it. Ready, three, two, one."

In wound care related procedures, assisting patients to focus their attention on decreasing pain or anxiety allows patients to reframe their perceptions, sensations and thoughts in relation to medical procedures. Medical hypnosis has been investigated to be effective in this strategy (3, 5, 8, 10). Unaddressed fears and anxiety lead to noncompliance and can complicate pain management. Therefore, treatment choices that mitigate pain and distress must be considered for patient's holistic care.

In routine anaesthesia practice, an anxious patient would normally be prescribed anxiolytic agents to reduce their preoperative stress/anxiety. Anxiolytic agents may have adverse reactions towards this patient because she has been identified to be allergic to several medications.

In this case, the option of non-pharmacological intervention to reduce her anxiety preoperatively assisted the patient to tolerate better to the regional anaesthesia technique, thus avoiding general anaesthesia.

Conclusion

Medical hypnosis is a proven, evidence-based technique for effectively lessening pain and anxiety in people undergoing a range of unpleasant medical procedures (3, 8, 11, 12). Performing regional anaesthesia in an anxious patient can be an uncomfortable experience for some patients and may prove to be a challenging situation for the anaesthetist and for the staff who is assisting the patient. Medical hypnosis to manage patient's emotional state during anaesthesia is an option that can be explored.

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Competing Interests

The authors declare that there is no conflict of interest.

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Informed Consent

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