



Hypnosis As A New Boon for The Supplement of Anesthetic Agent: A Case Control Study

Dr. Hemali Chande

Assistant Professor, Department of Anesthesia, Gujarat Adani Institute of Medical Sciences, Bhuj, Gujarat.

Dr. Hitesh Patel

Assistant Professor, Department of Anesthesia, Gujarat Adani Institute of Medical Sciences, Bhuj, Gujarat.

ABSTRACT

Aim: The aim of the present study to see that can hypnosis be used as an adjuvant to other analgesics agents.

Methods: A total of 30 cases were studied and follow up was taken. Patients participated in the study were screened for the hypnotic suggestibility by tests such as eyeball set or hand levitation test, done at least the day prior to surgery and appropriate response noted. VAS scale (1-100)8 was used to note level of anxiety. Out of 30 cases screened for susceptibility, 25 patients were chosen. On the day of surgery, the anxiety scale before administration of hypnosis was again assessed and noted. In all 25 patients, sufficient analgesia for IV access was demonstrated by observing for response to pin prick. After establishing IV access, patients were assessed for anxiety score and sedation by observation and patient response.

Results: The level of anxiety prior to hypnosis was in the range of 40 to 95 with a median of average of 60 (VAS 0-100). Post hypnosis the range of anxiety was from 5 to 25 with a median of 15. Five patients demonstrated complete analgesia with no change in heart rate. Three of the 25 patients had IV access pre-established for other reasons and could not be tested.

Conclusion: Hypnosis can be considered as an effective non-pharmacological tool for reduction of preoperative anxiety and sedation.

KEYWORDS : Anxiety, Analgesics, Hypnosis, Patients, Sedation

Introduction

Hypnosis is defined as condition of alert awareness with sharp receptiveness for acceptable suggestions. Although hypnotism is known to have been practiced by many people, it was James Braid who popularized its use in anesthesia.^{1, 2}

The hypnotic condition is an alternating situation of awareness characterized by deep relaxation.^{3,4}

Hypnosis has been a element of medicine all through the centuries. It was originate to be an efficient technique of giving anesthesia before the existence of chemical anesthetics. consecutively to use this technique of anesthesia more efficiently, it is important for the anesthetist to appreciate that hypnosis is a process or method, not an anesthetic agent.⁵

The first operation using hypno-anesthesia reported in the United States was a nasal polypectomy, performed thirteen years before Crawford Long started using ether as an anesthetic agent. To date, virtually every body cavity has been entered and almost every organ has been operated upon using hypno-anesthesia. Only recently, valid reports of operations performed under hypno-anesthesia made the nightly news.⁶

Hypno-anesthesia should not be considered a replacement for chemical anesthesia. Not all patients can be hypnotized as easily as they can be anesthetized. Nevertheless, hypnosis is a method which can be very useful to the anesthesia clinician before, during, and after a surgical procedure.⁷The following research work was taken into consideration keeping in mind the following aim to see that can hypnosis be used as an adjuvant to other analgesics agents.

Materials & Methods

A total of 30 cases were studied and follow up was taken. Inclusion criteria for the study included any surgical procedure with use of analgesic and sedative medications with or without full anesthesia. Exclusion criteria of the study were as follows: patient or parent refusal, any psychiatric disease. The present study was done at the Gujarat Adani Institute of Medical Science, Bhuj, Kutch, Gujarat, India. Ethical clearance was taken from the institutional ethics board. All the procedures were done under the supervision of specialist. All the participants in the study were explained about the technique and informed consent was obtained from them, either from the patient or their parent. Patients participated in the study were screened for the hypnotic

suggestibility by tests such as eyeball set or hand levitation test, done at least the day prior to surgery and appropriate response noted. VAS scale (1-100)8 was used to note level of anxiety. Out of 30 cases screened for susceptibility, 25 patients were chosen. On the day of surgery, the anxiety scale before administration of hypnosis was again assessed and noted. Verbalization method was used to achieve hypnosis, by suggestions and commands aim was done for "full body" relaxation; Light trance was achieved which was noted by regular and normal respiratory and eye movements. The verbalization was done specifically to achieve the analgesia of extremity, where an IV access was planned. The recommendations specified to accomplish analgesia of hands usually incorporated getting the hand gradually into a bucket occupied of ice, making it frozen and anesthetized. In all 25 patients, sufficient analgesia for IV access was demonstrated by observing for response to pin prick. After establishing IV access, patients were assessed for anxiety score and sedation by observation and patient response. During anesthesia, the dose of sedatives administered was noted. Postoperatively, patients were asked concerning the anxiety levels prior to going underneath anesthesia, a few memories of intra-operative events, and satisfactoriness of pain relief. Patient was further followed up till discharge for postoperative complications.

Results

Patient with ASA score from 1 to 3 were mostly included. On the basis of reading obtained it was found that hypnosis significantly decreased the level of anxiety in all patients. The level of anxiety prior to hypnosis was in the range of 40 to 95 with a median of average of 60 (VAS 0-100). Post hypnosis the range of anxiety was from 5 to 25 with a median of 15. When calculated and analyzed as means, the mean decrease was 45 with a SD of 8.30. When the student t test was used the difference was statistically significant as observed by the p value< 0.001.

Table 1: Anxiety Level In The Patients Pre & Post Hypnosis

Anxiety	VAS Value	Mean	Difference	Std. Difference	p Value
Pre Hypnosis	40 – 95	60	45	8.30	0.004
Post Hypnosis	5 – 25	15			

In 15 patients, hypnoanalgesia to IV access was determined by the following methods of response to pin prick and also with the observation for change in heart rate. Five patients demonstrated complete analgesia with no change in heart rate. Three of the 25 patients had IV access pre-established for other reasons and could not be tested. The patients were tested for response to pinch from surgical clip in the area and were continuously monitored with monitoring standards recommended by ASA (American Society of Anesthesiology). General anesthesia (GA) was used in 12 cases; 6 of them had endotracheal intubation. Hypnosis did decrease the dose of IV induction agent. The mean dose of induction agent used was 3.10 mg/kg, representing noticeable decline in its utilize when compared to the regular dose usually used (4-6 mg/kg). In all the subjects, significant initiation was established with the subsequent signs: eyelash reflex, vocal response & response during intubation.

Discussion

The word hypnosis is derived from the Greek word "hypnos," meaning sleep. In equivalent with its quick progress in psychotherapy, hypnosis also finds appliance in anesthesia and surgery.⁹ The originator of contemporary hypnosis is Milton Erickson, who defines hypnosis as a usual occurrence that any person of us can attain. It is an altered state of consciousness based on the code of dissociation, with a intense but alert awareness which is unlike from the condition of sleep.¹⁰ In the hypnotic state, however, the individual is not asleep, so the word hypnosis is misleading. How often have you said to a patient, "Relax, take a deep breathe and relax?" Relaxation can be presented, as an exacting mental and physical condition a person enters when he/she accepts suggestions without any object and acts upon them.⁵ Hypnosis or relaxation is a learning process in the therapist - patient relationship. Patients are treated in hypnosis, not with or by hypnosis.

In various public minds the word "hypnosis" has connotations of black magic, or hocus-pocus. The media, movies and fiction books misrepresent it as well. Many people believe that the therapist has incredible powers, but nothing is farther from the truth.⁶ No one can be hypnotized without their consent. Simply stated, it is an absolute, complete state of relaxation. This is commonly called the "trance state," which is accomplished by suggestions given to a patient while he or she is in a hypnotic state.¹¹

Hypno-anesthesia should not be considered a replacement for chemical anesthesia. Not all patients can be hypnotized as easily as they can be anesthetized. Nevertheless, hypnosis is a method which can be very useful to the anesthesia clinician before, during, and after a surgical procedure.¹² The analgesic effect of hypnosis in pain management has been extensively studied. It is used both for acute and chronic pain management in adults. Indeed at Liege University, in Belgium, Faymonville's team has been using hypnosedation that is, use of hypnosis as an adjunct to conscious sedation for surgery performed under local anesthesia since 1992.

In contrast to chemical anesthesia, hypnoanesthesia has the advantage of being completely safe and harmless to the patient. The disadvantage of using this method is time. In order to use hypnosis as the sole and total means of anesthesia or even as the major portion of the anesthetic procedure, more time is generally required than just the pre-anesthetic visit or phone call.¹³ Though it may very well be the method of choice for many patients, it is not often used because most patients are not aware of hypnosis as an alternative or adjunct to their care. Also, medical personnel are not trained in alternatives such as hypnosis, and those trained do not want to spend the time required for conditioning the patient prior to the proposed procedure.¹³

The present study did demonstrate that the non-pharmacological hypnosis is a very effective tool to decrease the anxiety associated with surgical procedures. As per the results obtained in our study, all patients did showed a decrease in their anxiety level. clinically and statistically highly significant lessening in anxiety was noted in the present study.

The demands of conscious sedation, often includes a high risk patient who cannot tolerate a General anesthesia. Hypnosis decreases the requirements of other medications and even sometimes avoiding GA in suitable patients.¹⁴ More significantly hypnosis can achieve a sta-

te of mind which helps in prevention of sudden agitation and movement, which could be potentially dangerous in some surgeries. Some of the procedures were done with use of regional analgesia supplemented by hypnosedation.

Montgomery et al., demonstrated that the diminish utilize of propofol in the hypnosis group; a mean difference of 32.63 (95% CI: 3.95, 61.30) compared to control group in the breast surgery patients.¹⁵ Reduce of anesthetic medications is beneficial by method of lessening the possible side effects. Postoperative nausea and vomiting (PONV) is said to be the "little big problem". It extends revival room stay, occasionally necessitates admission and expands the in general expenditure. So it was concluded that hypnosis can be considered as an effective non-pharmacological tool for reduction of preoperative anxiety and sedation.

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