



Cystoscopy Evaluation Using Hypnosis as Only Anesthetic: A Case Report

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Authors' contributions

This work was carried out in collaboration between both authors. Author PMWT wrote the draft of the manuscript, managed the literature searches and performed the surgery. Author RBS acted as hypnotist, performed the surgery and supervised the work. Both authors read and approved the final manuscript.

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Case Study

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ABSTRACT

Bladder cancer is the most common malignancy of the urinary tract. Cystoscopy evaluation is one of the follow-up procedure to determine the progress of bladder cancer. Hypnosis in many forms has been reported and practiced for millennia and secondarily promoted at the turn of the 19th century by several authors in the clinical arena. Several studies had demonstrated benefits of hypnosis in reducing pain intraoperatively. Here, we report on a 58-year-old man with bladder cancer who underwent cystoscopy evaluation using hypnosis as the only anesthetic.

Keywords: Cystoscopy; bladder cancer; hypnosis; anesthetic.

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1. INTRODUCTION

Nonpharmacologic interventions have been successfully used to address side effects in surgical patients. One of the most promising of these interventions is hypnosis [1]. Hypnosis in many forms has been reported and practiced for millennia and secondarily promoted at the turn of the 19th century by several authors in the clinical arena [2]. In clinical work, the hypnotic context is generally established by an induction procedure. During hypnotic induction, the hypnotist typically guides patients through peaceful and relaxing imagery with the goal of helping patients feel more relaxed, distracted from aversive stimuli, and more open to therapeutic suggestions [1]. The induction phase is followed by an application phase in which suggestions are made by the hypnotist to the patient, including that patients experience changes in sensorial or cognitive processes, physiology, or behavior [1].

The term hypnosis was coined by James Braid in 1843, but the practice of hypnosis has been around since antiquity [3]. Evidence indicating the use of hypnosis procedures dates back over a thousand years BC [3]. Franz Anton Mesmer (1734 - 1815) brought the medical use of hypnotic phenomena to the attention of the European medical community [4]. In treating patients, Mesmer provoked them to enter a trancelike state with changes in physical perception [4]. The Scottish physician James Esdaile, who used hypnosis as the only form of anesthesia in more than 300 surgical patients in India between 1845 and 1851, became the best known early hypnoanesthetist [4,5]. Hypnosis was later abandoned, following the introduction of general anesthetics (chloroform, ether and nitrous oxide) [5].

Bladder cancer is the most common malignancy of the urinary tract and the seventh most common cancer in men and the 17th in women [6]. The worldwide incidence rate is 9 per 100,000 for men and 2 per 100,000 for women [6]. Increasing evidence suggests that genetic predisposition has a significant influence on the incidence of bladder cancer. Tobacco smoking is the most important risk factor for bladder cancer, accounting for approximately 50% of cases [6]. The most common presenting symptom in patients with bladder cancer is microscopic or gross hematuria. Patients presenting with these symptoms should be evaluated with office cystoscopy to determine if a lesion is present. If one is documented, the patient should be

scheduled for transurethral resection of the bladder tumor (TURBT) to confirm the diagnosis and determine the extent of disease within the bladder [7]. Herein, we report a case of bladder cancer, who underwent cystoscopy evaluation using hypnosis as the only anesthetic.

2. CASE REPORT

A 58-year-old man was already diagnosed with urothelial carcinoma of the bladder 1 year before and he had already done the TURBT on that time. The tumor was seen in the posterior of the bladder and the resection was done completely. The pathologic report revealed that the tumor was already infiltrating the bladder muscle. Based on the guidelines [6-8], this finding told us to do the radical cystectomy procedure as a definitive therapy to this patient. On that time, patient did not accept the therapy we offered and he chose the radiotherapy instead of radical cystectomy. Recently, he already finished the 30-cycle of radiotherapy. Simultaneous with radiotherapy, we did the cystoscopy evaluation also every 3 months to determine whether the tumor is visible again or not. The three earlier cystoscopy evaluation revealed that no tumor was visible and the procedure was always using spinal block anesthesia.

In this case, we reported the forth cystoscopy evaluation to the patient. He told the urologist to use the hypnosis as anesthesia for him as he always attending the hypnotherapy class held by the urologist. The hypnotherapy class is held every week addressed to patients in the Dharmais Cancer Hospital which its aim is to teach the patients how to deal with their cancer-related pain using hypnotherapy as a media. After attending the class for several times and under direct supervision of the urologist as a hypnotist, patient felt he could deal with intraoperative pain by using hypnosis. The urologist accepted the patient's request and preparing him to do the cystoscopy evaluation under hypnosis as only anesthesia.

On the day of the surgery, routine anesthetic monitoring was started and intravenous cannulation performed in the operating room. Anesthetist standby in the operating room as resuscitation drugs and equipment were prepared also. Hypnosis was induced using eye closure and verbal suggestion with relaxing cues to induce a sense of wellbeing in the sitting position continued with sleeping position. Fifteen minutes after the induction, lithotomy position

was performed. Under this position, the urethrocystoscope was introduced. Patient had a steep angle of bladder neck so the urologist had to make a maneuver to deal with this problem. This procedure time was 10 minutes and no visible tumor was found in the bladder. During procedure, the patient did not report pain. There was slightly increased heart rate (84 beats per minute) on the time when urethrocystoscope passed through the bladder neck due to its steep angle.

At the end of the surgery, patient confirmed that there was no pain along the procedure. He was happy with the result and he was happier to know that the procedure did not need any anesthetic drugs. He was not amnesic and had a clear memory of all surgical procedures. He also told that there was a slightly stretching sensation on the time when urologist did the maneuver to deal with the bladder neck.

Immediately after the procedure, the patient was discharged without needing any further recovery. Due to the hospital's administration process needed, he was discharged from the hospital in the other day. When the cystoscopy evaluation is needed again another time, he insist to do the procedure using hypnosis as anesthetic under supervision of his urologist which also act as his hypnotist.

3. DISCUSSION

Bladder cancer is a cancer of the environment and age, the incidence and prevalence rates increase with age, peaking in the 8th decade of life, and there is a strong association between environmental toxins and bladder cancer formation. In general, adolescents and young adults (less than age 40 years) tend to develop well-differentiated noninvasive, rather than invasive bladder cancer. Bladder cancer is caused by genetic abnormalities and external risk factors [9].

At the initial diagnosis of bladder cancer, 70% of cases are diagnosed as non-muscle-invasive bladder cancer and approximately 30% as muscle-invasive bladder cancer. Painless hematuria is the most common presenting complaint. Others include urgency, dysuria, increase frequency, and in more advanced tumors, pelvic pain and symptoms related to urinary tract obstruction [10].

The standard treatment for patients with muscle-invasive bladder cancer as in recent case is

radical cystectomy. We already offer the radical cystectomy procedure to the patient, somehow due to another consideration, patient refusing this procedure to be done and chose the radiotherapy. We follow the progress of the cancer on the patient by doing cystoscopy evaluation every 3 months. Fortunately, there was no tumor visible on every procedure we have done. Generally, cystoscopy without therapeutic intervention is a less invasive procedure. This procedure could be effectively and safely performed by using only local anesthetic agent.

There are many competing theories as to what exactly constitutes and defines hypnosis. Marmer describes hypnosis as a psychophysiological tetrad of altered consciousness consisting of narrowed awareness, restricted and focused attentiveness, selected wakefulness, and heightened suggestibility [11]. Most will agree that hypnosis involves a system of skills and methods that allow the individual's mind and body to share information more effectively to achieve a therapeutic outcome. There is a normal distribution of ability and receptiveness, which is called hypnotizability. Although one would think that greater hypnotizability would correlate with greater therapeutic response, some have discovered that hypnotizability does not necessarily correlate with therapeutic benefit in surgical application [11,12]. In recent case, we have a patient with great hypnotizability due to his motivation, belief, faith and positive expectancy. He always attending the hypnotherapy class and always showing great motivation.

Several studies had demonstrated benefits of hypnotic relaxation in reducing pain intraoperatively, lessening need for medication, decreasing anxiety, and achieving greater hemodynamic stability [11,13-15]. Another several studies reported the superiority of hypnosis in reducing nausea and vomiting, blood loss and promoting wound healing [11]. Several case report studies had reported the transurethral resection cases under hypnosis as the sole anesthesia [16,17].

The limitations of hypnosis are not every patient can be hypnotized, and not every anesthesia care provider may be willing and able to integrate hypnosis into the practice. Patients receptive to hypnosis will reach a deeper hypnotic trance and attain a greater reduction of pain perception and operative stress than those who are less

receptive to hypnosis [4]. Even patients who do not reach the stage of hypnotic trance benefit from hypnotic suggestion [4]. Recent case showed that the patient had a great reduction of pain intraoperative. We assume that the patient had both a deeper hypnotic trance and hypnotic suggestion, considering that the patient had a great motivation and also he had a close personal relationship with the hypnotist. The cost-effectiveness of this procedure is it would be decreasing the need for medication and shortening length of stay in the hospital post-operatively.

4. CONCLUSION

In conclusion, from our experience of recent case with hypnosis as only anesthesia, we assume and consider that this procedure is currently safe and effective for cystoscopy evaluation procedure. Although the use of hypnosis in anesthesia may appear irrelevant at present, it remains a valuable tool as an adjunct to pharmacological anesthesia, thus possibly improving the cost/benefit ratio [5]. We recommend the readers to apply this knowledge into routine clinical practice. Further, we would expand the hypnosis for anesthesia in several urologic surgery such as anesthesia for transrectal biopsy of the prostate, extracorporeal shockwave lithotripsy (ESWL) for kidney stone, transurethral resection (TUR) of the prostate for prostate enlargement, and TUR of bladder tumor. This procedure needed an experienced physician. So, general physicians could not utilize this.

CONSENT

All authors declare that written informed consent was obtained from the patient for publication of this case report.

ETHICAL APPROVAL

Ethical approval is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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