

Treating Bulimia with Hypnosis and Low-Level Light Therapy: A Case Report (No Urge to Purge)

Eleanor Laser Ph.D and Michael Sassack

Chicago, Illinois

Abstract

This case report describes an effort to control bulimia nervosa by combining low-level laser therapy (LLLT)—the application of red and near-infrared light to specific body points—and hypnosis. A 29-year old female with a 14-year history of bulimia received one session of LLLT combined with hypnosis. Two weeks later, following a measurable decrease in bulimic episodes (purging), a session of psychotherapy and hypnosis was administered. Six months post-treatment, the patient has experienced a complete cessation of purging activities without recurrence. LLLT, when used in conjunction with hypnosis and psychotherapy, was effective in managing bulimia and may prove useful in treating other eating disorders.

Keywords: Bulimia, bulimia nervosa, LLLT, low-level light therapy, hypnosis, eating disorder, CBT.

Bulimia nervosa is a life-threatening disorder characterized by recurrent episodes of binge eating followed by self-induced vomiting or other compensatory methods (i.e. excessive exercise, fasting, the consumption of laxatives or diuretics, etc.) aimed at preventing weight gain (Agras, 1989; Fairburn, 1986; Freeman, 1988). According to most sources, the bulimic is intensely afraid of weight gain and exhibits persistent dissatisfaction with body and appearance, as well as a significant distortion in the perception of the size and shape of the body (Bossert, 1989; Walsh, 1997; Wilson, 1986).

Clinical trials combining hypnosis and psychotherapy in treating bulimia nervosa have produced mixed results. Many sources support the efficacy of cognitive-behavioral psychotherapy (CBT) in the treatment of people with bulimia nervosa in both group and individual settings (Agras, 1989; Bossert, 1989; Fairburn, 1986; Wilson, 1986) with results that are at most modest. However, even in those cases, the trial qualities vary and their sample sizes have often been too small to prove reliable (Loeb, 2000).

In certain studies, bulimic patients have been more hypnotizable than controls and have scored higher on a self-report scale of dissociative experiences (Covino, 1994; Esplen, 1998; Vanderlinden, 1995), with self-help proving as equally effective as one-on-one or group treatments (Durand, 2003). In most instances, a series of treatments are necessary to produce a favorable result, and even in those cases, the patient often returns to his or her bulimic tendencies after treatment ends (Loeb, 2000; Torem, 1992; Thackwray, 1993).

While traditionally used to relieve chronic and acute pain, low-level (or *cold*) laser therapy is the application of a single wavelength of red and near-infrared light (600-1000nm) over injuries or lesions (Baxter, 1991; Kreisler, 2002). The painless, non-toxic, non-thermal treatment is without side effects and often complements traditional therapies. (Basford, 1989; Baxter, 1991; Sakurai, 2000).

In LLLT, a laser directs biostimulative light energy at the cellular level to mitochondria – the “engines” of the cells, in that they are responsible for generating cellular energy - which the cells convert into chemical energy, in turn promoting natural healing and pain relief (Baxter, 1991). Through this process, LLLT has been clinically documented to increase the speed, quality, and tensile strength of tissue repair through this process of photobiostimulation. Additionally, the application of LLLT treatment is believed to enhance fibroblast function (Kreisler, 2002), the structural framework comprising human connective tissue that play a central role in the process of wound healing. Indeed, several studies attribute LLLT with producing anti-inflammatory and pain attenuation (Ceccherelli, 1989; Mizokami, 1991).

In this report, we describe how hypnosis combined with low-level laser therapy produced a complete cessation in purging episodes for a 14-year bulimic patient. The patient’s name was changed to protect her privacy.

Case History

On November 19, 2008, a 29-year old female, Alex, was referred because of purging episodes that accompanied her 14-year history of bulimia nervosa. Her disorder had varied in intensity over the years, from one or two purging episodes per week to ten or more a day. Customarily, she purged immediately after consuming large meals.

Alex expressed frustration with recent treatments that included both medications (anti-depressants and anti-epileptics) and psychotherapy, all of which failed to decrease her purging episodes. She sought an alternative treatment, owing to a particular purging episode during which she experienced severe epigastric pain.

Materials and Methods for LLLT

A low-level light (cold) laser from Cold Laser Therapy Equipment (<http://coldlaserequipment.com/>) was employed for all acupuncture points used in this study. During the course of therapy, each corporal (SP6, ST36, SJ6, PC6, HT7, DU24) and auricular (Point Zero, Shen Men, Mouth Point, Master Cerebral Point) acupuncture point was stimulated for approximately one (1) minute (see Figures for anatomical locations). The laser was applied to the surface of the skin and each point was stimulated at 780nm.

Description of Treatment

Alex expressed urgency to the therapist (EL), who suggested a trial combining hypnosis and LLLT to stimulate acupuncture points specific to the treatment of bulimia. During the beginning of the first session and before the hypnosis began, EL asked a series of intake questions of the patient which are as follows:

1. What do you want?
2. How will you know when you have what you want?
3. What would you gain when you have what you want?
4. What would you lose when you have what you want?
5. Is there any time you wouldn't want to have when you have what you want?
6. How would your life be different when you have what you want?

Before the hypnosis treatment began, a rapport was established with the client. This was accomplished by being sincerely empathetic to the patient's situation and validating their condition. The patient was initially engaged in small talk while matching their language, thereby establishing a relationship. During this time, nuances such as tone, facial expression, mannerisms and gestures, and choice of words were important in establishing this rapport.

People appreciate others with whom they have something in common. One way that EL used to quickly establish a commonality with the patient was to analyze the patient's perception strategy – in other words, to match the patient's language. One's perception strategy is revealed by the sensory language that the person favors. Most people express themselves predominantly with words from one of the following sensory categories: visual (relating to pictures); auditory (to sound); kinesthetic (to movement and feeling); olfactory (to the sense of smell); gustatory (to the sense of taste) (see Table 1).

Table 1. Representational terms and phrases of sensory categories

Visual	Auditory	Kinesthetic	Olfactory	Gustatory
Aim	amplify	attach	breathe	aftertaste
Appear	argue	attack	essence	bite
Blind	babble	backing	fragrant	chewy
Blush	boom	balance	fume	delicious
Bright	cadence	be agitated	inhale	flavor
Brilliant	call	bend	odor	lick

It is important to presuppose that the client will be hypnotized. There is no right way to go into trance and no wrong way. One must reassure the patient that they can remove oneself from the critical voice inside and ask it to step aside if it comes up. It is also important to speak and act as if trance will occur and the person will experience results. It was asked of the patient how quickly they would go into trance – now, or in a few moments from now. EL treated the client as if they were having a regular conversation during the session.

In order to ensure the client went into trance, the therapist also made sure to become rhythmic with the patient's breathing, matching inhale and exhale – as the client exhaled, EL spoke, and as she inhaled, EL was silent. The patient was validated throughout the session, indicating they were good (ie, yes, I understand how you feel).

During the session, EL used a strategy called “permissive hypnosis”, which consists of presenting the client with choices (this is opposite of authoritarian hypnosis). The following are language patterns that are used with a permissive nature and were employed during the session: “you may”; “what happens when you”; “you can really enjoy”; “I am wondering if”; “you can imagine”; “yes, that’s right”; “you don’t have to”; “one can decide to”.

Dr. Laser also used a series of techniques in order to develop instinct rapport with the client. First and foremost, she simply to empathized with the client. For clients to experience a feeling that the therapist understands and appreciates them as individuals, one must strive to put oneself "in the patient's shoes". In this situation, it is important to be cognizant of the client's situation, feelings, and motivations. The key to successfully expressing empathy is sincerity. Ordinary phrases will not cover a feeling of actual indifference in the practitioner.

Ripple Effect

During induction that included the employment of favorite place imagery, the therapist introduced ideomotor signaling which Alex used to communicate affirmative and negative responses.

- Hypnotic induction: Your eyes won't close until your inner mind gives you permission.
- As soon as your unconscious mind gives you permission, you can go to a safe place that you will find peaceful and comfortable. And you can choose this place and picture yourself there.
- Ideomotor Signal explanation: One of the fingers on one of the client's hands will “say” it is the “yes” finger. At this point, allow the client time to experience the pleasant feeling of being in the safe place. When the client's ideomotor signals (finger movements) that are involuntary. Then repeat for the “no” finger. Again, an involuntary finger signal will take place.
- In this comfortable place, you can set your body temperature to a temperature that you enjoy. This comfort zone will stay with you throughout the procedure. Set your body temperature now. Signal me when your body temperature is set and you feel comfortable.

It was originally asked of the client where she felt comfortable and safe, to which she answered “the beach”. The following is a partial script (known as the Ripple Effect) used for hypnosis of the client:

On the beach, a small child casts a stone on the surface of a clean, calm, and clear lake. As the stone skips further away, it carries with it anxiety, unwanted habits, and destructive patterns. The water ripples away cravings, urges, and desires to purge. The stone begins to sink, down deep into the lake, and it floats even deeper and deeper down into the water. As it deepens, so will your state of hypnosis and the stone finally floats all the way down to the bottom of the lake. And as you know, a stone just goes with the flow, it does not feel a thing; it just relaxes and goes with the tide, feeling comfortable and safe.

While deepening the patient's hypnotic state, the therapist simultaneously administered, with the help of an LLLT technician (MS), low-level laser targeting specific auricular and corporal acupuncture points as described above.

Ten points in total were stimulated during a treatment that lasted 25 minutes. The acupuncture points used are points associated with the treatment of bulimia.

FIGURES:

Acupuncture Points Used in Treatment:

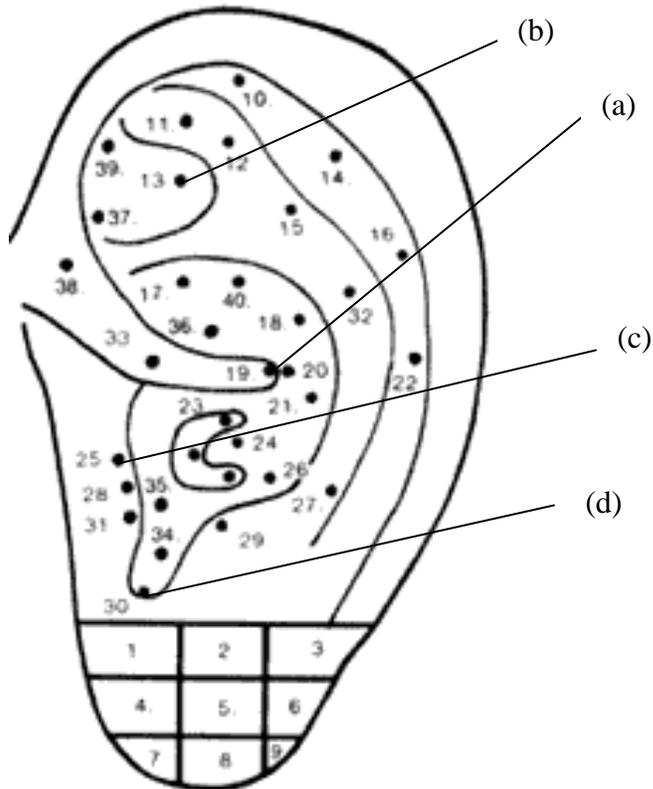


Figure 1: (a) **Point Zero**, at the junction of the conchal ridge and the root of the ascending helix: general homeostatic balance, decreases addiction. (b) **Ear Shen Men**, on the triangular fossa superior to the origin of the superior and inferior crus of the antihelix: calms the spirit. (c) **Mouth Point**, in the hollow of the ear, behind the tragus: regulates the mouth, specific for eating disorders by promoting digestion. (d) **Master Cerebral Point**, just below the antitragus, on the lobe: tempers negative emotions, diminishes anxiety, and promotes relaxation.



Figure 2: **Du-24**, just inside the midline of the anterior hairline: calms the spirit

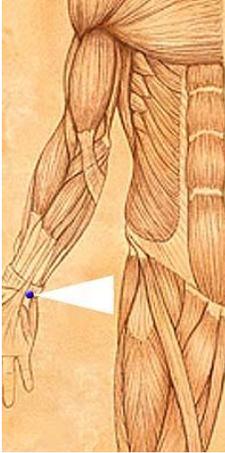


Figure 3:HT-7, On the transverse wrist crease, in the small depression between the pisiform and ulna bones: calms the spirit, regulates and tonifies heart qi

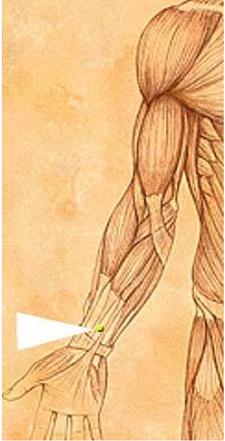


Figure 4:PC-6, On the anterior forearm, about 2 inches superior to the transverse wrist crease, between the tendons of palmaris longus and flexor carpi radialis muscles: calms the spirit, harmonizes the stomach, alleviates nausea and vomiting.

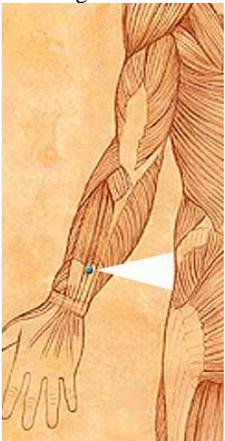


Figure 5:SJ-6, On the dorsal forearm, between the radius and ulna, about 3 inches superior to the dorsal transverse wrist crease: regulates and harmonizes the body

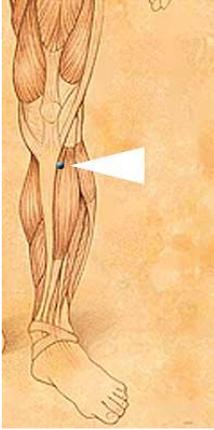


Figure 6:ST-36. On the leg, one finger breadth lateral to the tibia's anterior crest, about 3 inches inferior to the lower border of the patella, in the depression to the lateral side of the patella: roots and strengthens the spleen/stomach system, treats counterflow qi (which results in vomiting)

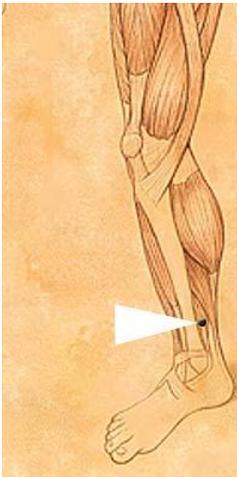


Figure 7:SP-6, On the medial leg, about 3 inches superior to the medial malleolus, on the posterior border of the tibia: tonifies yin, harmonizes spleen/stomach system

Second Session

Two weeks later, on December 3, 2008, Alex returned to the therapist for a one-hour session during which she expressed minimal purging urges. The session included psychotherapy and additional hypnosis, along with an energy-tapping treatment aimed as a phobia cure. No LLLT was administered during this follow-up session.

Results

After the hypnosis-LLLT treatment session, the patient reported a decreased desire to binge eat and a commensurately diminished desire to purge after eating. After the follow-up session, the patient reported a complete cessation of binge eating and purging, expressing a strengthening of resolve that carried over from the initial session.

As of October 2009, approximately one year later, the patient remains stable. The patient remained in e-mail contact with the therapist, each time reporting successful management without recurrence of any bulimic episodes.

“Following two sessions . . . I experienced relief from my bulimic symptoms,” the patient wrote in a May 18, 2009 email.

Discussion

Combining hypnosis and LLLT is unique to the study of bulimia nervosa treatment. That their conjunctive administration can eliminate symptoms of a chronic eating disorder non-invasively and without

side effects suggests promising applications. Currently, no further studies have been planned. However, both Mr. Sassack and Dr. Laser are interested in continuing this course of therapy for patients should the occasion arise. More research will determine whether their combined use provides long-term relief as well as applications for the treatment of other eating disorders.

References

- Agras, W.S., Schneider, J.A., Arnow, B., Raeburn, S.D., & Telch, C.F. (1989). Cognitive-behavioral and response -prevention treatments for bulimia nervosa. *Journal of Consulting & Clinical Psychology, 57*:215–221.
- Basford, J.R., Sheffield, C.G., & Harmsen, W.S. (1999). Laser therapy: a randomized, controlled trial of the effects of low-intensity laser irradiation on musculoskeletal back pain. *Archives of Physical Medicine and Rehabilitation, 80*:647–652.
- Baxter, G.D., Bell A.J., Allen, J.M., & Ravey, J. (1991). Low-level laser therapy: Current clinical practice in Northern Ireland. *Physiotherapy, 77*:171–178
- Bossert, S., Schnabel, E., & Krieg, J.C. (1989). Effects and limitations of cognitive behavior therapy in bulimia inpatients. *Psychotherapy & Psychosomatics, 51*:77–82.
- Ceccherelli, F., Altafini, Castro, L., Avila, G.L., Ambrosio, F., & Giron, G.P. (1989). Diode laser in cervical myofascial pain: a double-blind study versus placebo. *Clin J Pain, 301–304*.
- Covino, N.A., Jimerson, D.C., Wolfe, B.E., Franko, D.L., & Frankel, F.H. J. (1994, August). Hypnotizability, dissociation, and bulimia nervosa. *Abnorm Psychol, 103*(3):455-459.
- Durand, M.A. & King, M. (2003). Specialist treatment versus self-help for bulimia nervosa: a randomized controlled trial in general practice. *British Journal of General Practice, 53*:371–377.
- Espen, M.J., Garfinkel, P.E., Olmsted, M., Gallop, R.M., & Kennedy, S. (1998). A randomized controlled trial of guided imagery in bulimia nervosa. *Psychological Medicine, 28*:1347–1357.
- Fairburn, C.G., Kirk, J., O'Connor, M., & Cooper P.J. (1986). A comparison of two psychological treatments for bulimia nervosa. *Behavior Research & Therapy, 24*:629–643.
- Freeman, C., Sinclair F., Turnbull J., & Annandale, A. (1985). Psychotherapy for bulimia : A controlled study. *Journal of Psychiatric Research, 19*: 473–478.
- Kreisler, M., Christoffers, A.B., Al-Haj, H., Willershausen, B., & d'Hoedt, B. (2002). Low level 809nm diode laser-induced in vitro stimulation of the proliferation of human gingival fibroblasts. *Lasers Surg Med, 30*:365–369.
- Lang, Elvira., & Laser, Eleanor. (2009) Patient Sedation Without Medication. Rapid rapport and quick hypnotic techniques, 16:129-131
- Loeb, K.L., Wilson, G.T., Gilbert, J.S., & Labouvie, E. (2000). Guided and unguided self-help for binge eating. *Behavior Research & Therapy, 38*: 259–372.
- Mizokami, T, Aoki, K., Iwabuchi, S., Kasai, K., Yamazaki, Y., Sakurai, T., et al. (1993). Low Reactive Level Laser Therapy - A clinical study: Relationship between pain attenuation and the serotonergic mechanism. *Laser Therapy, 5*:165–168.
- Sakurai, Y., Yamaguchi, M., & Abiko, Y. (2000). Inhibitory effect of low-level laser irradiation on LPS-stimulated prostaglandin E2 production and cyclooxygenase-2 in human gingival fibroblasts. *European Journal of Oral Science, 108*:29–34.
- Thackwray, D.E., Smith, M.C., Bodfish J.W., & Meyers, A.W. (1993). A comparison of behavioral and cognitive-behavioral interventions for bulimia nervosa. *Journal of Consulting & Clinical Psychology, 61*:639–645.
- Torem, M.S. (1992). The use of hypnosis with eating disorders. *Psychiatr Med, 10*(4):105-118.
- Vanderlinden, J., Spinhoven, P., Vandereycken, W., & Van Dyck, R. (1995, October). Dissociative and hypnotic experiences in eating disorder patients: an exploratory study. *American Journal of Clinical Hypnosis, 38*(2):97-108.
- Walsh, B.T., Wilson, G.T., Loeb, K.L., Devlin, M.J., Pike, K.M., Roose, S.P., et al. (1997). Medication and psychotherapy in the treatment of bulimia nervosa. *American Journal of Psychiatry, 154*:523–531.
- Wilson, G.T., Rossiter E., Kleifield, E.I., & Lindholm, L. (1986). Cognitive-behavioral treatment of bulimia nervosa: A controlled evaluation. *Behavior Research & Therapy, 24*:277–288.