

- can Dental Association, 87(4), 1231-1233.
- Schwartz, L., & Chaves, C.M. (1968). Facial pain and mandibular dysfunction. Philadelphia: Saunders.
- Scott, D.S., & Barber, T.X. (1977). Cognitive control of pain: Effects of multiple cognitive strategies. *Psychological Record*, 2, 373-383.
- Secter, I.I. (1971). A syllabus on hypnosis and a handbook of therapeutic suggestion. Chicago: American Society of Clinical Hypnosis Education and Research Foundation.
- Sheehan, P.W., & McConkey, K.M. (1982). Hypnosis and experience: The exploration of phenomena and process. Hillsdale, NJ: Lawrence Erlbaum.
- Somer, E. (1991). Hypnotherapy in the treatment of the chronic nocturnal use of a dental splint prescribed for bruxism. *The International Journal of Clinical and Experimental Hypnosis*, 39, 145-154.
- Solberg, W.K. (1983). Epidemiology, incidence and prevalence of temporomandibular disorders: A review. In D.M. Laskin, W. Greenfield, E.N. Gale, et al. (Eds.), *The president's conference on the examinations, diagnosis and management of temporomandibular disorders* (pp. 30-39). Chicago: American Dental Association.
- Solberg, D.K. (1986). Temporomandibular disorders: background and the clinical problems. *British Dental Journal*, 160(2), 157.
- Stam, H.J., McGrath, P.A., & Brooke, R.I. (1984). The treatment of temporomandibular joint syndrome through control of anxiety. *Journal of Behavior Therapy and Experimental Psychiatry*, 15, 41-45.
- Turk, D.C., Meibenbaum, D., & Genest, M. (1983). Pain and behavioral medicine: A cognitive behavioral perspective. New York: Guilford.
- Wolberg, L.R. (1948). *Medical hypnosis*, Vols. I & II. New York: Grune & Stratton.
- Watkins, J.G. (1971). The affect bridge: A hypnoanalytic technique. *International Journal of Clinical and Experimental Hypnosis*, 19, 21-27.
- Yemm, R. (1979). Neurophysiologic studies of temporomandibular joint dysfunction. In G.A. Zarb, & G.E. Carlsson, (Eds.), *Temporomandibular joint: Function and dysfunction*. Copenhagen: Munksgaard.

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Why not also Mozart and Mesmer?

The Combination of Imagery and other Techniques in Clinical Practice

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■ Hypnosis is not a unitary thing. To go into hypnosis can mean a shift along several dimensions of consciousness, and different techniques combined to foster a rich imaginative involvement can be used. In a dental practice over a number of years, techniques have been used and developed to combine music with visual imagery, kinesthetic imagery and music hallucinations. The response and the experience of music, the therapeutic value and the kind of music used are discussed. Imagery-based techniques mainly depending on kinesthetic imagery and tactile stimulation are described. Use of music and other imaginative involvements are of great value as therapeutic goals to overcome resistance in limited psychotherapy, especially for patients and therapists with less knowledge of analytically oriented hypnotic sessions.

This paper will describe various approaches in using Altered States of Consciousness. I do not say "hypnosis", for what does a music-lover do when enjoying a concert with closed eyes, dissociated from the outer world? Is it self hypnosis, reverie, meditation or what else?

My own way for many years is a collecting of a variety of influences from various therapists, many from abroad, who in different combinations focused on such aspects as the relaxation response and compliance with suggestion, deep inner experience, meditation, ideomotor techniques, dissociation, pain management, lifting of repression and resistance barriers and imaginative involvements. Also the use of imagery and music. Music as such, or in combination with imagery. Or music hallucinations sometimes in combination with real kinesthetic, mesmeric passes.

This my interest in the power of music stems not only from my years as a musician when studying at the university. Dr. Lozanov from Bulgaria has in some way also to do with it. All of us know of suggestopedia, his method to accelerate the learning of a foreign language when the student relaxes in passivity listening to classical music. As they do so, the teacher enunciates in a special baroque music rhythm the words to be learnt. Rhythm is important, not only for the jazz fan or the dancer. All of us can admit

the distracting, often sleep-inducing effect of a monotonous sermon in church. Regular thumping on a train, rolling of waves. Sounds and rhythm belong to the same family. And in my own life as a dentist sounds of the daily routine mean much.

The voice, sounds and rhythm

We know that sounds which mean danger to the patient, for example the sounds of the drill, are factors of great importance when handling a patient with a dental fear. Sounds are important to the pain control and the pain threshold. However, there are different kinds of sounds. Most colleagues would agree that the roaring traffic outside will not disturb their patient's trance, while sharp sounds from the nurse handling instruments which are symbols for danger can evoke reactions. The most important sound, however, is what we produce ourselves - our voice. Many hypnotists are of the opinion that using a monotonous wording is the most effective way of inducing hypnosis. I disagree. Consider how an actor uses his voice in creation of a fantasy to get rapport to his audience. Similarly in hypnosis the inflection, intervals and tone of voice exert great influence on the results. In my opinion what we say is not as important as the way we say it. The tone of voice and the music of the speech. And if we are poor in ability to paint with words, we can get a lot of help by painting with music (Gabai, 1968, 1969, 1971; Hesse, 1992; Walker, 194).

Induction techniques with music

I often discuss music and art with my patients, and those who are interested how to relax involved in music are invited to do so. I ask for their taste of music and then start with a simple breathing technique, and leave them with earphones on to become more and more relaxed and absorbed by the music of choice, going with them on the path of relaxation. I give uncomplicated suggestions for relaxation, calm, confidence, inner-experience and ego strengthening. Often resistance can easily be eliminated.

Then at a second and third session we reach deeper levels. In the post-music discussions patients reveal that they are often unaware of my voice and what was said. Their statements support what we know of dissociation and amnesia. So, providing music as a focus of attention is one way to overcome barriers. In itself music is an effective deepening technique, and particularly useful for highly hypnotizable subjects who want to go further in hypnosis and have a real therapeutic need for it, but have a conflict about autonomy.

This is an example of my approach: After a formal induction of any kind my wording might be:

"Now listen carefully. We're going to use music for a while in a rather special way. Soon I'm going to start playing some music and you're going to listen to it in a special way. You're going to let the music pick up your mind and carry it. The music will take your mind on a pathway of sound, carrying it further and further into hypnosis.

And as you listen to the music you'll feel increasingly absorbed in the experience and the response to the music. You may have beautiful imagery in response to the music. You may feel the sensation of going further into hypnosis, letting that music be a moving pathway of sound to take you further. Your experience will be delightful ..."

"When you have reached a deeper level of mind, suggest to yourself you are seated in a summer meadow, near a stream, under a shady tree ... You are free, all your "mists" are put aside for the day ... for once you are free to relax, and simply BE ... The peace of the meadow is filling you. You can hear the sounds of NATURE ... the bubbling of the water, the rustling leaves ... the humming of insects ... But you have a deeper desire: Your wish that the meadow could communicate its meaning to you, more deeply ... that it would invite you inside to deeper experiences, sharing feelings. Deepen your state by counting to 10, so you may be deep enough to share what the nature wants to say to you. Let the music take you to places where you have never been. Let the sounds show you deeper levels of consciousness than you have ever experienced ..."

When the music is ended the patient is asked to return. As to the kind of music I use for deeper hypnosis, this is a result of trial and error. Especially highly hypnotizable subjects describe their musical experience as different in quality in hypnosis than as awake. Some also experience colours more vividly.

Music, imagery and kinesthetic imagery

I find it most rewarding to work with patients with visual imagery. But if it can be combined with kinesthetic imagery - the better. Walking can be an effective kinesthetic experience. So a session with this and as many sensory inputs as possible might go as follows after the initial induction:

"It is a very early morning and you're standing on a beach. There is a wide sweep of cool, fine sand ... A sky with a sun just above the horizon and a quiet sea breaking. You stand there looking at the sea and how the waves form, rolling quietly in, curling, breaking, washing up the beach in curves of soft, creamy foam. Then ebb again, leaving the sand glassy so that the pale blue sky is reflecting in it ... You can imagine that you are standing there calmly and quietly, just watching. Watching the colours... aqua-blue of the sea touched with orange tint as the sun creeps, creeps up from the horizon. The sky above, turquoise touched with soft, pinky gold ... But mostly, it's the waves, rolling in, curling, breaking, washing up and going back. The waves are abbing and flowing in time with your breathing. You become more and more absorbed in imagining these things. And as you do so, you're letting yourself drift further into hypnosis."

How much detail you describe depends on the individual and his needs. It is always possible to finish that stage by saying: "It's OK to let it fade away. Now, listen to what I have to say to you ..." Then giving appropriate suggestions. But if you want to add kinesthetic imagery it might go as this:

"And you start to walk ... see yourself walking on the firm, cool sand. Maybe you are barefoot. I want you to get the feeling of walking, putting one foot after the other ... A nice swinging walk ... Imagine the wet, firm cool sand under your feet. But above all, you'll imagine your effortless swinging walk (and so on, saying it repetitively) ... And the sound of the seagulls, the breaking of the waves form a background of music ... Nature's music. Along with your own monotonous, swinging walking. Which moves you further into hypnosis."

I use music as therapeutic input to foster imaginative involvement in these non-invasive therapies. I use it in different ways, according to the needs and personality of the patient. Sometimes I end up the kinesthetic imagery, but then with a walk to a turbulent stream in order to use "silent catharsis". This is an uncovering technique. With music still in the background I suggest that a problem like a strong tension will float into one hand. Then clenching this hand around it and throwing it out into the deep rapid water the traumatic problem can be seen like a dirty ball floating away (Haley, 1967).

Imagery and ego-strengthening - mesmeric techniques

I do not define the precise manner to the patient how to respond to the music, but with the imagery some guidelines are given about what to experience and to focus upon. Typically I might suggest delightful sensory imagery, enrichment and depth of inner experience, stepping outside one's immediate problems, loading up the mental batteries. As the patient becomes more and more involved and enveloped in the music a range of feelings might be suggested. Feelings like peace, wonder, serenity, happiness and joy, exhilaration, interest... Along with the music also new strength will enter and when awake again the capacities developed in response to the music easily can be transferred to other important situations of life (Hartland, 1971).

Research during the last decades (Black, 1964, 1969; Tinterow, 1970; Bongartz, 1988) have indicated that therapeutic methods of unusually gifted clinicians like Mesmer, Braid, Esdaile have value. However, because their skills were not supported by research their methods fell into disuse. I am using a simple deepening technique for 20 years and it consists of mesmeric passes along the arms of the patient, starting with a firm touch on the shoulders. It is combined with the patient's exhalation. The effect is astonishingly good and I think this additional tactile stimulation together with other sensory and auditory inputs cause an overload to the limbic system. I use it with or without music (Esdaile, 1850; Jencks, 1977; Lowen, 1975).

Auditory distraction and music hallucinations

It is known that both hyperacuity and deafness can be suggested to a hypnotized person. As he can be trained to hear a sound as uninteresting as a needle dropped on the floor, we also can anticipate a more impressive response when we combine the hyperacuity with music. Many patients dislike the dental injection, but they can stand it. But

most individuals are uncomfortable with the drill. Even after an injection the sound creates a fear for many because the nature of drilling conveys information how close to the nerve the treatment is. So, a noiseless treatment would be ideal. The author has tried various ways of combining different sounds, music and hypnosis. The techniques found most helpful are Halker's Rapid Induction Technique (RIT; Halker, 1986) combined with Ebrahim's Secluded-Room Technique (SRT). A music-hallucination may require at least a trance of medium depth. A finger lift by the patient tells when the hallucination is perceived. The sound of the flowing water in the cuspidor in the dentist's office is used as a background to the suggestions given, and helps to create the music-hallucination. After initial induction I may say:

"Now you are in your mental-room. This room is filled with CALM. And ... with each breathing-out you can say the word of CALM, filling your room more and more ... Just concentrate and listen closely ... Among all the sounds from the flowing water you'll recognize fragments of music, your favourites. It will increase more ... and more. Becoming louder and louder ... Until everything has gone, all sounds... except my voice. And the music ... You will be so involved with the music. No longer in fragments, it's the full music ... You're so surrounded by it, so nothing can disturb you, and enter your MENTAL MUSIC ROOM ... Your finger will lift when you hear the full music ..."

So, hearing the music, the patient often can be trained to use his finger as a volume-control, raising it higher for more music.

Clinical comments

The nature of positive and negative hallucinations is described by many authors (LeCron, 1962; Kroger, 1963; Jencks, 1977; Hartland, 1971, 1988). Experiencing auditory hallucinations is regarded as somewhat more difficult than olfactory and gustatory hallucinations. My clinical experience is that in varying degree medium state is enough (Wikström, 1978).

A couple of patients reported that the sound of the drill penetrated the music-barrier. Other sounds, however, i.e. from buzzers could not be heard at all, even if louder. It seemed that anticipated sounds from fearful actions like drilling were more likely to be noticed than unexpected or new sounds. For those the patient was still deaf. Another observation made is that the music-barrier can be broken when grinding or drilling continues for a longer period. This is apparently due to a summation process. This might not be a problem if the dentist can work with short sequences and interruption.

A report from Aldous Huxley (Haley, 1967) as a patient's experience of music is interesting. Huxley noted that at first it was difficult for him to develop auditory hallucinations. His trance became lighter. However, by combining two sensory experiences he succeeded. At first he hallucinated rhythmical movements of his body, thus creating a rhythm. Then he added an auditory hallucination to it. I had a patient, a lady who experienced a music hallucination. I had to be away from the office for a couple of

minutes and when I returned I found her waving her hands rhythmically. She exclaimed: "No doctor, let's have a rest". When awakened she reported she had felt the monotonous rhythm dancing at a Mexican fiesta. When exhausted she had loudly pleaded for a rest. And the doctor - was I. Without knowing it she had combined ideomotor and ideosensory activity.

Selection of music

The music selected by patients is different, sometimes surprising. The choices of a month cover everything from gregorian church music to Jimi Hendrix in Concert. Included in between Zorba the Greek, Air by Bach, Mozart concertos, Beethoven's 4th symphony. A lover of Chopin produced a couple of waltzes. A surprising client loved bullfighting and was in Spain and experienced the atmosphere, folkloric scene and most importantly, the music. The fearful sounds from the dental office were obscured by fiery marches and pasodobles.

The music used for deepening the trance should be sensory music, meant to hold the attention and not to be disruptive of the steady progression into hypnosis. Baroque music is very useful and not so related to the patient's taste of music being in the alert state. Bach, Vivaldi, Boccherini and others with the instruments of that time; lute, guitar, flute and cembalo, are good. Sometimes the kind of music is chosen after the feelings I want to produce. Joy and lightness could mean "Spring" or "Summer" from Vivaldi's "Four Seasons". Patients with spiritual experiences and beliefs may select some of Beethoven's many symphonies. If the goal is to enjoy and maintain an inner peace "In a Summer Garden" by Delius, Bruch's Symfonie No 1, if not the Swede, Berwald: "Sinfonie Singulière", would be appropriate. Or why not Gerschwin: "Rhapsody in Blue", the middle part? If we want a strong victorious feeling and a stronger ego - a piece like Grofé's "Grand Canyon Suite" is just vigorous, majestic, breaking barriers. Simon/Garfunkel's "Bridge over troubled waters" may assist the patient back to alertness. A modernist would choose Mahalia Jackson singing or John Coltrane "A Love Supreme". Somewhat near is Debussy: "Sunken Cathedral", with depth related to feeling and cosmic consciousness. Younger patients may choose electronically produced music like Kitaro's "Silk Road Suite". What is good and works for them works for me.

Maybe you want to play the music on an ordinary speaker system, but the stronger effects are experienced when the music is heard through headphones.

Summary

The use of music is of great therapeutic value. It can enhance other strategies and also, in combination with other sensory involvements like imagery, kinesthetic imagery and non-invasive therapy help develop coping skills. "Music", said the English composer Benjamin Britten, "is therapy which goes to the heart avoiding the unnecessary roundabout to the brain".

References

- Black, S. (1964). Effects on anterior brain responses of variation in the probability of association between stimuli. *Journal of Psychosomatic Research*, 9, 33.
- Black, S. (1969). *Mind and Body* (p. 156). London: Kimber.
- Bongartz, W. (1988). Behandlung von Phantomschmerzen mit "Animalischem Magnetismus", Fallbericht. *Experimentelle und Klinische Hypnose*, 5(1), 1-11.
- Ebrahim, D. (1986). *Meditative Techniques*. In L.E. Unestahl (Ed.), *Hypnos i teori och praktik* (Swed.; p. 75). Örebro: Veje.
- Esdaille, J. (1850). Mesmerism in India and its practical application in surgery and medicine. London: Longman's Green & Co. (Reissued under the title: *Hypnosis in medicine and surgery*. New York: Julian Press, 1957).
- Gabai, M. (1968). Psychosophtologie et musique. *Information Dentaire*, 50, 862-864.
- Gabai, M. (1969). Therapie par les sons et sophrologie. *Information Dentaire*, 51, 2443-2455.
- Gabai, M. (1971). La detente psycho-musicale. *Revue Francaise d'Odonto-Stomatologie*, 18, 961-967.
- Haley, J. (1967). Advanced techniques of hypnosis and therapy. Selected papers of Milton H. Erickson M.D. New York: Grune and Stratton.
- Halker, J. (1986). Rapid Induction Technique (p. 74-75). In L.E. Unestahl (Ed.), *Hypnos i teori och praktik* (Swed.). Örebro: Veje.
- Hartland, J. (1971). Medical and dental hypnosis. London: Balliere Tindall. (4th. ed. by D. Waxman, 1988)
- Hesse, H.P. (1992). Man and music in the interplay of mental, submental and somatic processes. *Hypnos*, 19(3), 159-169.
- Jencks, B. (1977). Your body-biofeedback at its best. Chicago: Nelson Hall.
- Kroger, W. (1963). Clinical and experimental hypnosis (pp. 18-20). Philadelphia: Lippincott.
- Lowen, A. (1975). Bioenergetics (pp. 48-54). New York: Penguin.
- LeCron, L. (1952). Experimental hypnosis (p. 326). New York: Citadel.
- Tinterow, M. (1970). Foundation of hypnosis. Springfield, Ill: C.C. Thomas.
- Walker, W.-L. (1994). Combining music and words as a pathway through hypnosis: Practical guidelines. *Hypnos*, 23(2), 79-91.
- Wikström, P.O. (1978). The use of auditory distraction and music hallucinations in dental practice. In F.A Frankel & H.S. Zamansky (Eds.), *Hypnosis at its Biocentennial - Selected Papers* (pp. 289-298). New York: Plenum Press.

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