# Multiple chemical sensitivities hypnotically resolved

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Private Practice, Chicago, Illinois, USA, and Dermatology and Cutaneous Surgery, University of South Florida, Tampa, Florida, USA Dysosmia or distorted sensing of unpleasant odors and hyperosmia or increased sensitivity to odors often accompany multiple chemical sensitivities and can be debilitating for a patient. Multiple chemical sensitivities has until recently been a purely clinical diagnosis, but recent studies have found confirmatory evidence that it is a valid entity. Objective: To ameliorate or resolve multiple chemical sensitivities. Methods: Hypnotic intervention. A man experienced sudden onset dysosmia and hyperosmia starting after the floors in his house were refinished and sealed. He was then unable to live in his house due to the sealant odor or any other space with odors and eventually was sleeping in a tent on a relative's outdoor deck to avoid being sickened by the odors. He was diagnosed with multiple chemical sensitivities but various treatments had failed to resolve his symptoms. Results: Specific hypnotic suggestions of breathing filtered pure air and of collapsing negative emotional experiences against positive emotional experiences were able to facilitate his full recovery. Conclusions: Hypnotic suggestions tailored to the individual may be successful in resolving or ameliorating multiple chemical sensitivities.

*Keywords:* dysosmia, hyperosmia, multiple chemical sensitivities, hypnotic

#### Introduction

Dysosmia is a distorted perceiving of unpleasant odors often not detectable by others, while hyperosmia is an increased sensitivity to odors in general. Either or both may be associated with multiple chemical sensitivities (MCS) where the person feels ill in response to exposure. MCS is an acquired chronic disorder with nonspecific symptoms of somatic distress in multiple organ systems related to exposure to low levels of chemicals below toxic levels. In a controlled study using a low concentration of the odorant n-butanol, MCS participants reported greater perceived odor intensities compared with controls and more experience of unpleasantness of

Abstract

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the odor and increasing symptoms. MCS study participants also had higher pulse rate and lower pulse rate variability compared with controls (1). A positron emission tomography (PET) study of MCS patients showed a higher metabolism in the olfactory cortex during neutral exposure without odorants compared with controls (2). In a controlled trial, women with MCS were found to have increased harm avoidance and reduced 5-HT1A receptor binding potential in the anterior cingulate and amygdala (3). An elevated proinflammatory cytokine profile with significantly increased interleukin 1 beta, 2, 4, and 6 and significantly decreased interleukin 13 in MCS patients has also been noted compared with controls (4). The pro-inflammatory cytokines can produce flu-like symptoms and fatigue and can exacerbate any preexisting inflammatory conditions. Inflammation appears to be a key process along with oxidative stress, and a study of patients with electrohypersensitivity and MCS showed elevated blood histamine in 40 percent, blood nitrotyrosin elevation in 28 percent, and circulating autoantibodies against O-myelin in 23 percent suggesting an autoimmune response. Pulsed cerebral ultrasound computed tomosphygmography in the same study showed hypoperfusion in the capsulothalamic area suggesting an inflammatory process involving the limbic system and thalamus (5). Genetic polymorphisms were studied in a case control study of Japanese men with MCS and a significantly elevated odds ratio risk of MCS was found for SOD2 Ala/Ala and Val/Ala compared to Val/Val (6). These studies confirm that MCS is a real entity. Since pain is often reported as a symptom of chemical intolerance, hypnosis along with other approaches has been suggested as of potential benefit for MCS (7). We present a case of MCS that resolved utilizing hypnotic suggestion.

## Case report

One of us (EL) had a patient age 60 years who had sudden onset MCS beginning in November 2015 when his wife was terminally ill. The couple had owned a scuba dive shop and specialized in underwater photography and videography. He returned to his home after its wood floors had been refinished. There he was exposed to the fumes from a polyurethane sealer while asleep for nine hours. Those sealer fumes created in him a severe reaction that was diagnosed as multiple chemical sensitivity syndrome. His symptoms included cognitive problems, unusual sweating on feet and groin, extremely cold feet, headache, dizziness, dry lips, sore throat, sinus pressure, bloody nose, burning and watering eyes, rash on arms and legs, skin flaking, itching and burning on arms, sleep problems with no more than four hours continuous sleep while taking 10mg zolpidem (Ambien), complete sleepless nights, upset digestion, muscle stiffness, tremors and shaking, heart palpitations, muscle twitching and spasms, extreme fatigue, facial flushing, dehydration, teeth hurting and feeling gritty, and a high pitch sound in his left ear. His symptoms continued unabated after his wife died in January 2016.

He sought medical help, including a visit to a dermatologist, who prescribed ointments for his skin. Nothing helped and his symptoms were so severe he was unable to live in his home because of its chemical odors. He tried living in hotels, nine different ones, but his symptoms persisted because of carpet fumes and other chemical smells. Finally he ended up sleeping in a tent on his brother's back deck for the entire month of May 2016. He could not enter his brother's house, because of odors from laundry detergent, candles, etc. He could not enter public buildings, because of fumes from carpet, sealants, etc. To enter his own home for mail and other matters, he wore a chemical respirator.

He could not tolerate department stores, home improvement stores, clothing stores or grocery stores and buildings with carpet, but he could tolerate fast food outlets such as McDonald's, Burger King, Taco Bell and Whole Foods grocery stores. He said a strong food smell made him feel better. The chemical smells that incapacitated him included those from fertilizer, pesticides, rubber products including tires, air from forced heating and cooling systems, dryer exhaust, gas ovens, charcoal grills, wood fires, cigarettes, adhesives, printed flyers, newspapers, mail, automobile interiors, gasoline and diesel. He could not tolerate synthetic clothing or clothing that had been washed with fabric softener or laundry detergent and he could not tolerate soap, deodorant, or air freshener.

An emergency room doctor referred him to one of us (EL). She and the patient spoke on the phone and she prepared him to enter her home office. He asked her not to wear perfume and wanted to know if she had wood floors. She accommodated both requests and seated him in her living room. With his permission, her intake and future sessions were filmed. She learned that he was a scuba instructor and diver. He had owned a scuba store with a pool in the rear of the store, where he taught. She happened to be familiar with the store, as it had been near her former home. She frequented the store, because she swam with fins and googles, which he stocked. While she had not personally met him before, her familiarity with his store helped to create a rapport.

She employed utilization once she knew that he loved to be in water and would rather be under water than anywhere else. Erickson's utilization theory involves utilizing the person's own attitudes, thinking, feeling, and behavior to assist in trance induction and trance work (8). She hypnotized him and took him deep down into the water, a mile down. In EL's experience, working with autoimmune issues, one must go down deep. Water! What a perfect opportunity to go deep. He loved breathing the filtered air from the tank. He felt comfortable and safe breathing this air. While he was deep down breathing this delicious air, his body cleansing and healing, she tapped his right shoulder to anchor the association of the tapping with the experience of breathing the safe pure filtered air from the tank, a neuroliguistic programming (NLP) technique (9). She continued tapping, talking softly, describing the underwater scenery, the fish swimming by, the filtered air he was breathing, repeating this over and over, as he breathed this healing air. She continued to tap on his right shoulder (the positive), strongly suggesting and repeating over and over how the filtered air from the tank was healing his mind and body. Then she tapped his left shoulder while having him remember the noxious odor of the floor sealant (the negative) to anchor the negative association. After several repetitions, she stopped tapping, but kept her fingers on both of his shoulders to collapse the anchors by associating them together (Fields, 1990), integrating the desired positive experience of breathing purified air from the tank with the conditioned negative experience of the odor of the floor sealant and allowing the positive experience to neutralize or override the negative experience.

When he was re-alerted from hypnosis, she asked "How do you feel?" He said, "I feel good." After the session, he returned to and remained in his home. He told her that he "swam" through the house as he entered. He slept there and resumed normal function. Two sessions were needed for him to rebalance his life. The second session reinforced the positive and negative anchoring experiences and their integration.

#### Discussion

In his theory of utilization Milton Erickson posits that utilizing the person's own attitudes, thinking, feeling, and behavior to assist in trance induction and trance work can enhance its efficacy. Through hypnosis, the therapist speaks to the person's unconscious that can lead to a change in perception or behavior. In this case, the hypnotic revivification of the patient's prior experience of breathing purified air from a scuba tank and adding the NLP technique during trance of collapsing the negative anchor of the noxious odor against the positive anchor of the pure air resulted in their mutual inhibition and permitted his recovery. This case illustrates the ability of the unconscious mind to respond positively to the hypnotic suggestion of breathing purified air and to alleviate the MCS, a condition that often is otherwise poorly responsive to treatment as this patient had experienced prior to having the hypnotic suggestion. While the hypnotic suggestion was tailored specifically for him as a scuba diver who could relate to breathing filtered air from a tank and regulator, the concept of filtered or purified air to breathe could be utilized with others as well. Suggesting and vivifying in trance a source of pure filtered air delivered by an imaginary hose and mask or suggesting that the room air has been specially filtered and purified and is pure and safe are other options in creating a positive experience that can be anchored and integrated with or collapsed with the anchored negative odor experiences of the MCS patient. The triggering of the MCS symptoms by low concentration chemical odors may thus be counteracted, giving the patient much sought relief.

## Ethical compliance

The authors have stated all possible conflicts of interest within this work. The authors have stated all sources of funding for this work. If this work involved human participants, informed consent was received from each individual. If this work involved human participants, it was conducted in accordance with the 1964 Declaration of Helsinki. If this work involved experiments with humans or animals, it was conducted in accordance with the related institutions' research ethics guidelines.

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Submitted: February 15, 2017. Revised: March 20, 2017. Accepted: March 30, 2017.