



Hypnosis as a Treatment Modality for Chronic Pain Management: Level of Evidence

Hypnosis has long moved away from the myths and mystery that have been shrouding it for decades. Today, there is no longer a doubt that hypnosis can serve as a potential therapeutic tool. The constantly increasing number of reports on hypnosis appearing in the scientific literature indicates an enduring willingness on the part of the scientific and clinical communities to use it as a therapeutic approach in various clinical conditions.

Chronic pain affects millions of people worldwide and brings with it not only personal suffering and misery but also great economic burden on the individual and society. The clinical and scientific communities have been searching relentlessly for a cure that will be efficient, with low cost and with minimal danger and risk of side effects to the patient. Hypnosis has often been suggested as such an approach for various chronic pain conditions, and the capability of new methods of brain imaging to enable observations of the influences of hypnosis on the processes associated with pain¹ increases the interest in this modality.

Numerous controlled studies have shown the way in which hypnosis can be beneficial for chronic pain patients. For example, Tan et al² showed the effectiveness of hypnosis in the treatment of adults with chronic low back pain, and Vanhaudenhuyse et al³ showed the impact of self-hypnosis/self-care on chronic pain patients in a tertiary pain center. More specifically in the orofacial area, Abrahamsen et al^{4,5} showed that hypnosis can offer clinically relevant pain relief in persistent orofacial pain and effectively reduce some aspects of complex temporomandibular disorders (TMD) pain. Abrahamsen et al⁶ also described the hypnotic modulation of brain activity associated with nociceptive processing in chronic TMD patients. In an extensive review of the efficacy of clinical hypnosis with headaches and migraines, Hammond⁷ concluded that hypnosis can be considered an efficacious treatment for headaches and migraine.

All these studies (and many others) strengthen the belief in the efficacy of hypnosis for the treatment of chronic pain. But how strong is the evidence?

A meta-analysis of 18 studies, published in 2000 by Montgomery et al,⁸ examined the effectiveness of hypnosis in pain management and determined the effectiveness of hypnotic suggestion relative to other nonhypnotic psychological interventions. The analysis revealed a moderate to large hypnoanalgesic effect, supporting the efficacy of hypnotic techniques for pain management. It is noteworthy that the analysis

referred to the effects of hypnosis on various conditions, including burns, cancer, headaches, radiologic procedures, and experimental pain inductions.

A more recent meta-analytic study, which narrowed the focus to investigate the efficacy of hypnosis for managing chronic pain, was published in 2014 by Adachi et al.⁹ The analysis referred to six randomized controlled studies and six controlled clinical trials that targeted only chronic pain conditions and applied hypnosis as the main therapeutic intervention. Types of chronic pain included fibromyalgia, headache, irritable bowel syndrome, multiple sclerosis, noncardiac chest pain, orofacial pain, osteoarthritis pain, spinal cord injury, TMD, and other forms of chronic pain. When compared with standard care, hypnosis provided a moderate treatment benefit.

A systematic review and meta-analysis of randomized controlled trials dealing with the use of hypnosis and relaxation specifically for TMD was recently published by Zhang et al.¹⁰ Regrettably, only three trials, including 159 patients, proved eligible to be included in the analysis. All provided a low level of evidence, and the results suggested limited or no benefit of hypnosis/relaxation therapy on pain or on pressure-pain threshold of the skin surface over the temporomandibular joint (TMJ) and masticatory muscles. However, low-quality evidence suggested some benefit of hypnosis/relaxation therapy on maximal pain and active maximal mouth opening compared with no/minimal treatment.

Undoubtedly, hypnosis bears great potential as a treatment that can be considered free of side effects and risk of adverse reactions. When administered by a qualified clinician, it can bring a substantial remedy to the suffering patient. It is, however, not free from outside influences such as the skill of the hypnotist, the subject's hypnotic susceptibility, the context of the hypnotic session, the nature of suggestions, and various additional environmental and cultural influences. The considerable heterogeneity of the published studies leads to the view that the effect of hypnosis in the treatment of chronic pain can, to date, be defined as moderate at most. Developing standard modes of administering hypnosis to chronic pain patients and applying these to large populations of patients can increase the level of evidence for—and the belief of many clinicians in—this important modality.

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