Hypnosis for Pain Management in the Older Adult

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Abstract and Introduction

Abstract
Pain is a physical, emotional and psychological phenomenon that is often ignored in older adults causing depression and poor quality of life. Older adults report the use of complementary and alternative medicine in some form with 80% of these users reporting improvement in their health conditions. Although physical pain in the older adult is usually managed with pharmacologic interventions, Methods that may reduce the use of prescription drugs may decrease adverse effects that can compromise the physiologic state of the older adult. Hypnosis has continued to gain acceptance within mainstream medicine as an appropriate treatment and can be integrated safely with conventional medicine as an effective treatment for a variety of conditions in the older adult. It is an intervention that can be used for relaxation and pain control, especially when conventional pharmacologic regimens have failed. The Purpose of this article is to review the concepts related to pain in older adults; the use of complementary and alternative medicine in the older adult; hypnosis and the older adult (i.e., background, definition, benefits, research, mechanism of action, hypnotizability, and the process); and the implications of using hypnosis for pain management in the older adult.

Introduction

Hypnosis is one of the oldest and most documented psychological interventions for the reduction of pain and suffering. In recent years, it has become an increasingly more acceptable therapeutic intervention by health care providers in a variety of settings. Although scientists differ on theories about the nature of hypnosis, it is obvious that persons who are hypnotized report changes in the way they feel, think, and behave. Research studies are inconclusive about the outcomes of hypnosis. However, many studies (Ashton et al., 1997; Cadranel et al., 1994; Chaves & Dworkin, 1997; Hrezo, 1998; Lang, Joyce, Spiegel, Hamilton, & Lee, 1996; Marchioro et al., 2000; Patterson & Jensen, 2003; Van der Does, Van Dyck, & Spijker, 1988) have demonstrated that self-hypnosis in persons who experience pain or stress can reduce the need for pain medications.

Outcomes of untreated or mistreated pain in the older adult can lead to depression, anxiety, and feelings of hopelessness. Hypnosis may be an option for the older adult who does not want to take pharmacologic agents for chronic pain. To date, only a limited number of studies have documented the outcomes of hypnosis in the older adult (Ashton et al., 1997; Gay, Philippot, & Luminet, 2002; Lang et al., 1996). However, research needs to be done that uses gerontologic concepts and Methods when using hypnosis in older adults. This article provides an overview of concepts related to pain in older adults; the use of complementary and alternative medicine (CAM) in the older adult; hypnosis (i.e., background, definition, benefits, research, mechanism of action, hypnotizability, and the process); hypnosis and the older adult; and the implications of using hypnosis for pain management in the older adult.

Pain in Older Adults

Pain is a common occurrence in older adults. Severe and persistent pain can be debilitating and have consequences that compromise health care outcomes and survival (Alden & Heap, 1998; http://www.asaging.org/at/at-195/pain1.hmtl. Elders in pain—gaps found in research and practice, 1998). Up to 40% of community-dwelling older adults have pain with up to 83% of older adults in long-term care facilities reporting pain (Chodosh, Ferrell, Shekelle, & Wenger, 2001). Because of the increased prevalence of chronic illness in older adults, pain is seen twice as often in this group than in younger cohorts. There is a substantial cost associated with pain in the older adult related to depression, social isolation, sleep disturbance, gait problems, and increased use of health care services (Chodosh et al., 2001).

Reports of pain are the leading reason for office visits among older adults. In any health care facility, pain management is an important activity for those who work primarily with geriatric patients (Dellasega, 2000). In seeking more effective, less expensive treatments for pain, older adults are in need of current information to make informed decisions about complementary and alternative therapies to decrease their risks of adverse reactions and complications that may result from pharmacologic interventions. Although most painful, chronic conditions are treated with pharmacologic interventions, these often pose some risk for the older adult. In reality, the older adult is often given improper or inadequate pain medication prescriptions (Kemper, 2002).

Common myths occur in relation to pain and older adults (Dellasega, 2000; Potash, 2003; Victor, 2001) (Table 1). Some of these myths lead to inadequate pain control because older adults receive ineffective doses of analgesics or no treatment for pain. Untreated pain can affect health outcomes in older adults. For example, immobility is used as a way to control pain, which may lead to numerous negative consequences including deconditioning, depression, and social isolation (Kemper, 2002). Aging can affect the metabolism of medications (i.e., absorption, distribution, metabolism, and excretion) and alter the effectiveness of pharmacologic interventions for pain management (Ebersole & Hess, 1998). Absorption may be affected because of changes in gastrointestinal motility—the absorption may be either increased or decreased. Distribution, metabolism, and excretion of medications should be considered depending on the condition of essential organs, like the liver and kidneys, when prescribing any medication for the older adult.

The Use of Complementary and Alternative Medicine in Older Adults

One option for pain management in older adults who do not want to use opioids or other pharmacologic agents is the use of CAM. According to recent studies (Cherniack, Senzel, & Pan, 2001; Eisenberg et al., 1998), 42.1% of the American population uses some form of CAM, with 39% of the older population using CAM. A more recent study (Williamson et al., 2001) identified an even higher percentage (73%) of older adults using CAM, much higher than the national average. Of the older adults who use CAM, 58% reported that they did not discuss the use of CAM with their medical doctor or health care practitioner (Astin, 1998).

By the year 2020, older adults will make up 22% of the total population (Ebersole & Hess, 1998). Because of a predicted increase in chronic conditions, older adults may choose to use

CAM more often to help manage their health. This aging group of baby boomers may be more receptive to the use complementary and alternative therapies, including hypnosis. Despite the growing number of older adults using CAM, little information is available to this segment of the population regarding treatment options of CAM, specific costs, benefits, risks, or precautions pertinent to this age group.

The older adult reports the use of CAM in the following chronic conditions: arthritis, back pain, heart disease, allergies, and diabetes (Foster et al., 2000). For these conditions, the most common types of CAM are chiropractic medicine, herbal remedies, relaxation techniques, megavitamins, and religious or spiritual healing (Foster et al., 2000). Complementary and alternative medicine therapies, like herbal remedies (e.g., ginkgo biloba and ginseng), vitamins, music therapy, touch, massage therapy, and neurofeedback, may improve cognitive function in the older adult (Adams, Gatchel, & Gentry, 2001).

Hypnosis is a treatment that can alleviate pain and may help a patient to feel empowered, have an increase in self-esteem, and develop more positive health attitudes without the side effects of opioids (e.g., sedation, decreased mental status) (Lynch, 1999). Older adults with intact cognitive function may use hypnosis, taught in one-on-one instruction or in a group setting, to control pain and decrease the use of pharmacologic agents.

Background on Hypnosis

Hypnosis is one of the oldest and most documented psychological interventions for reducing clinical pain and suffering (Doody, Smith, & Webb, 1991). Hypnosis for sedation was used widely before the development of safe and effective surgical anesthesia (Chaves & Dworkin, 1997). In the 19th century, it served as the sole anesthetic for minor and major surgeries in India. Physiologic benefits from hypnosis were observed, but not fully understood, including decreased heart rate, decreased respirations, improved mood, and overall relaxation. In the past decade, hypnosis has increasingly become an adjunctive therapy in the management of pain in the acute care setting as well as in outpatient settings (Chaves & Dworkin, 1997; Doody et al., 1991; Montgomery et al., 2000). It has been shown to be effective in reducing both clinical and experimental pain (Montgomery et al., 2000). Interest to incorporate hypnosis into clinical practice has increased because it seems to be cost-effective and because recent neuroimaging studies have provided an increased understanding of the mechanism of action of hypnosis (Patterson & Jensen, 2003).

Definition . . . What Is Hypnosis?

Hypnosis is a "mind–body" connection that an individual goes through using an established ritual that can affect neurotransmitter release and relieve pain through concentration and relaxation (Anderson, 2000). After a repetitious verbalization, action, or movement, the individual becomes attached to a desired outcome. Quick entry into a natural and spontaneous trance occurs, in which pain relief takes place, like the state you enter before falling asleep—pleasant and relaxing. Hypnosis is not lack of consciousness or mind control but a heightened sense of personal internal awareness and control (Hrezo, 1998). The patient is always in control and can "wake up" whenever she or he desires to do so. Physiologic responses to hypnosis (e.g.,

changes in the sympathetic responses, endogenous opioid responses, and possible inhibition of neuronal firing at the spinal cord level) have been documented through evoked potential studies, electroencephalogram studies, and brain imaging studies (Patterson & Jensen, 2003).

Benefits of Hypnosis

Hypnosis often reduces pain even when traditional medical and psychological interventions have failed (Alden & Heap, 1998; Chaves & Dworkin, 1997; Hrezo, 1998; Patterson & Jensen, 2003). Beyond the obvious reductions in pain that can occur with hypnotic suggestions, there are additional benefits (Figure 1) (Nash, 2004; Williamson et al., 2001). Unlike other behavioral Methods of pain treatment, hypnosis has the potential to provide rapid pain relief that can be maintained for long periods of time (Gay et al., 2002). Although pharmacologic treatment for pain is still appropriate, when pain medication does not provide adequate pain relief, hypnotic techniques can be added easily to the treatment regimen (Hrezo, 1998; Thomas, 1991).

Figure 1.

Because hypnosis can be provided in a group format and can potentiate the efficacy of cognitive behavioral therapy, hypnotic techniques can be time efficient. When patient care is enhanced through the use of hypnotic techniques and medical complications are reduced, the cost

effectiveness of hypnosis becomes obvious (Montgomery et al., 2000). Older adults who attend group sessions in long-term care facilities may benefit from having hypnosis integrated in these activities.

Is There Research That Supports the Use of Hypnosis in Pain Management?

Comparative efficacy studies have demonstrated that hypnosis is often more effective than biofeedback, relaxation, cognitive behavioral therapy, acupuncture, or morphine for both acute and chronic pain with 75% of those who use hypnosis experiencing some relief of pain (Patterson & Jensen, 2003). Hypnotic techniques have proven useful for pain associated with burns, cancer, invasive medical procedures, headaches, musculoskeletal conditions, irritable bowel syndrome, and fibromyalgia (Haanen et al., 1991; Lynch, 1999; Montgomery et al., 2000). Hypnosis has demonstrated particular utility for reducing cancer pain, including bone marrow transplant pain and coping with invasive procedures associated with cancer treatment (Ernst, 2001; Handel, 2001; Lynch, 1999; Marchioro et al., 2000; Pattison, 1997; Renouf, 1998).

What Is the Mechanism of Action of Hypnosis?

Pain reduction with hypnosis is not due solely to nonspecific effects such as relaxation or anxiety reduction. In contrast with what many medical professionals believe, hypnotic pain reduction is also not achieved through the placebo effect (Alden & Heap, 1998). Furthermore, it is generally accepted that hypnotic analgesia is not mediated by the endogenous opioids or by stress-induced analgesic mechanisms. There appears to be a specific effect of hypnotic suggestions on pain transmission and registration at several levels of the nervous system (Patterson & Jensen, 2003).

The front limbic attention system has been implicated in hypnotic analgesia (Rainville et al., 1999). It is believed that hypnotic pain control involves an active process of acknowledging the pain and subsequently, focusing attention away from the pain. On the basis of recent research (De Pascalis, Magurano, Bellusci, & Chen, 2001; Faymonville et al., 2003; Kropotov, Crawford, & Polyakov, 1997), it has been hypothesized that moderate to highly hypnotizable persons have more efficient front limbic attention systems that allow them to actively engage attention ability and disattend from pain.

Can Anyone Be Hypnotized?

The effectiveness of hypnotic suggestions for pain relief depends on the individual's hypnotic responsiveness or hypnotizability (Hrezo, 1998). Hypnotizability is a personality trait that is normally distributed and can be measured using standardized scales (Raz & Shapiro, 2002). Individuals who can sustain attention in the face of distractions and generate vivid visual imagery are often moderate to highly hypnotizable. Highly hypnotizable individuals can dramatically reduce their feelings of sensory pain and suffering during hypnosis, whereas less hypnotizable persons can usually reduce the suffering component of pain to a great extent (Hrezo, 1998). Hypnosis has a place in pain treatment for both low and highly hypnotizable persons.

Because hypnotic pain control is dependent on the individual's ability and active participation in hypnotic strategies, hypnotic analgesic techniques are consistent with current self-management approaches for pain control. Self hypnosis is often a valuable addition to the treatment of many pain syndromes, including headaches and cancer. Even when the pain is not dramatically reduced, individuals generally report an increase in self-efficacy after mastering hypnosis (Lynch, 1999; Patterson & Jensen, 2003).

What Is the Hypnotic Process an Individual Goes Through?

Hypnotic analgesia techniques usually concentrate on diminishing the individual's experience of pain and suffering. First, the individual is guided into a state of relaxation and focused attention using a "hypnotic induction" similar to becoming fully engrossed in a movie. Next, the clinician helps the individual to restructure the pain experience through the use of imagery and verbal instructions or suggestions for comfort and alteration in physical sensations. Unlike other psychological techniques for pain management, hypnotic responses are generally experienced as effortless.

When hypnosis is used for chronic or enduring pain, treatment begins with hetero-hypnosis, hypnosis of one person by another. The clinician induces a hypnotic state and provides specific suggestions for pain relief. A brief cue for reentering hypnosis (e.g., an eye role) is provided. If continued treatment is necessary, the clinician frequently will teach the patient self-hypnosis and will be asked to practice this technique daily. When individuals have learned self hypnosis, they can often transfer their newly found attention abilities outside of a hypnotic state.

Hypnosis consists of diverse levels of trances that vary by individual and within the hypnotic session. Levels range from alert, to daydreaming, loss of awareness of surroundings, or the deep trance, when the individual actually feels the activity or image. Details of hypnotic procedures and suggestions will differ depending on the goals of the practitioner and the purposes of the clinical or research endeavor. Traditionally procedures involve suggestions to relax, although relaxation is not necessary for hypnosis and a wide variety of suggestions can be used including those to become more alert.

Hypnosis and the Older Adult

Little research specifically addressees the use of hypnosis with the older adult. Only three studies (Ashton et al., 1997; Gay et al., 2002; Lang et al., 1996) were found that reported a mean age of participants of 60 to 69 years.

However, these studies were not focused specifically on the older adult or on the benefits to this cohort. Ashton et al. (1997) found that patients who were taught self-hypnosis before coronary artery bypass surgery (mean age was 64 years in the hypnosis group) needed less postoperative pain medication and had less postoperative anxiety and tension compared with a control group. The self-hypnosis group also reported less depression, anger, fatigue, and confusion after the surgery. When comparing hypnosis and relaxation, Gay et al. (2002) reported that older adults with osteoarthritis who were in the hypnosis group (mean age was 64 years in the hypnosis group) were effective in reducing the amount of analgesic medication needed to control arthritic pain. Lang et al. (1996) further supported the use of hypnosis in the older adult when self-

hypnotic relaxation was used during interventional radiologic procedures (mean age was 69 years old in the hypnosis group). Participants used less midazolam plus 25 μg of fentanyl through a patient-controlled analgesia/sedation, reported less pain, and had less oxygen desaturations during the procedures, as well as less interruptions during the procedures for hemodynamic instability. Although these studies did not directly address the use of hypnosis in the older adults, the benefits of this intervention are documented.

Implications for Pain Management Using Hypnosis in the Older Adult

Hypnosis may provide a complementary or alternative approach for pain management in the older adult. The health care provider should be aware that this successful treatment is no longer considered mystical or voodoo but can provide safe, cost-effective outcomes in patients with chronic pain for whom traditional Methods of treatment have stopped working.

Health care providers who work in adult day care centers, senior centers, hospices, continuing care retirement centers, assisted living facilities, or nursing facilities can influence the use of hypnosis in their facilities. With knowledge that it is a safe and effective intervention for pain management in the older adult, the availability of hypnosis can be included easily in daily activities for the older adult.

Careful consideration needs to be given when choosing a hypnotist to work in any health care setting. Hypnosis and hypnotic therapies are not regulated in most states, and hypnotherapists usually have no state licensure requirements. The "lay" hypnotist should be trained in hypnotherapy with no less than 100 hours of classes. They lack medical, psychological, dental, or other professional training. The professional hypnotist is a licensed health care provider who has 7 to 9 years of university coursework plus additional supervised training. Information should be provided to patients on how to choose a hypnotherapist (Table 2).

It is also important for health care providers to be aware of professional organizations that can provide educational and research information for patients interested in hypnotherapy. A list of professional hypnosis organizations is provided in Figure 2. The goal of these organizations is to provide an opportunity to learn from and interact with members of multiple disciplines as well as to improve clinical practice and research. These professional organizations are made up of registered nurses, social workers, dentists, psychologists, psychiatrists, and other physicians who are dedicated to the highest level of scientific inquiry and the conscientious application of hypnosis in a variety of health care settings for the older adult.

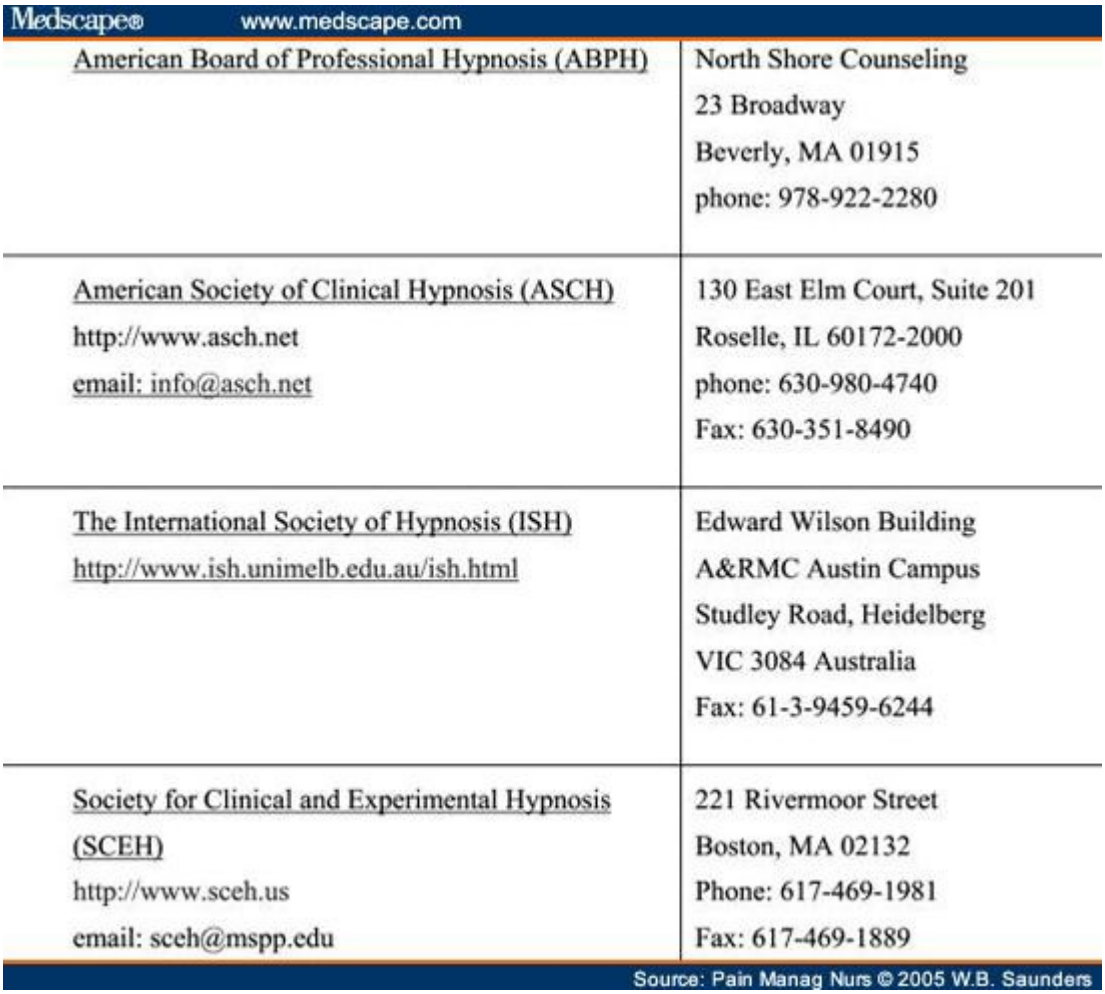

Figure 2.

Pain in the older adult is often minimized, mistreated, or misdiagnosed. Left untreated, outcomes of chronic pain can lead to depression, social isolation, sleep problems, and difficulty performing activities of daily living. The benefits of complementary and alternative therapy in the older adult are often ignored; yet, this group is very open to many of these interventions. When used appropriately, hypnosis may be a useful intervention to improve pain management in the older adult.

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