American Pain Society
RESEARCH
EDUCATION
TREATMENT
ADVOCACY

(568) Educational intervention about placebo mechanisms makes placebo use more acceptable for patients with chronic musculoskeletal pain

N Kisaalita, R Staud, R Hurley, and M Robinson; University of Florida, Gainesville, FL

Placebo effects can be potentially potent for reducing clinical pain. Although the psychological and neurobiological mechanisms underlying placebo analgesia are well understood, current scientific placebo conceptualizations have failed to disseminate to the lay public. While no consensus currently exists regarding the acceptability of clinical placebo use, surveys have consistently shown that healthcare providers are knowingly prescribing placebo treatments. Although placebo use opponents have historically touted the negative consequences of deception as their primary argument, new research suggests that both deceptive and non-deceptive placebos may be acceptable to patients. The current study examines placebo analgesia acceptability among chronic pain patients by exploring: 1) the role of situational factors in influencing placebo acceptability; and 2) the potential impact of a mechanism-based placebo analgesia educational intervention on perceptions of treatment acceptability, knowledge, and effectiveness. Patients (n = 57) suffering from chronic musculoskeletal pain completed an online questionnaire assessing placebo analgesia efficacy, knowledge, conceptualization, and acceptability across different treatment scenarios. Patients were randomly assigned to either receive a brief mechanism-based placebo educational intervention or a brief control educational prompt prior to questionnaire completion. Our findings showed that perceptions of placebo acceptability were highly context dependent ($p < .001$, $np2 = .291$), with patients rating placebo treatments more satisfactory when used non-deceptively and when used as complementary treatments. Results showed that the educational intervention greatly improved perceptions of placebo knowledge ($p < .001$, $np2 = .245$), effectiveness ($p = .006$, $np2 = .129$), and acceptability ($p < .001$, $np2 = .188$), even in deceptive treatment scenarios. In summary, our results highlight the importance of contextual factors in pain patients' appraisal of placebo, and illustrate the powerful effects of a brief educational intervention in bolstering placebo acceptability.

(569) Effectiveness of hypnosis for post-operative pain management of minimally invasive thorascopic approach to repair pectus excavatum: retrospective analysis

R Manworren, E Girard, A Verissimo, K Ruscher, S Riccardino, R Weiss, and D Hight; Connecticut Children's Medical Center, Hartford, CT

The minimally invasive approach to repair pectus excavatum (Nuss procedure) results in a smaller scar, but significant pain. This retrospective study compares the post-operative pain management outcomes of adolescents who self-selected to receive self-hypnosis training prior to Nuss Procedure with those who did not receive training. In 2011, 8 of 22 patients who underwent Nuss procedure received self-hypnosis training. Post-operatively, patients received epidural analgesia with local anesthetic, intravenous (IV) patient-controlled opioid analgesia (PCA), IV NSAIDs and transitioned to oral opioids and NSAIDs. Patients who received pre-surgical self-hypnosis training used fewer milligrams per hour of morphine equivalents ($p=0.012$) and reported lower mean pain intensity over the first five days of their hospital stay ($p=0.041$). There was no difference in length of stay or maximum self-reported pain scores. Despite the opioid-sparing effect of self-hypnosis training, nausea, vomiting, and hypoventilation were significant adverse effects experienced by patients in both groups. The results of this retrospective study suggest hypnosis provides an opioid-sparing effect for managing moderate to severe pediatric post-operative pain after Nuss procedure. A randomized clinical trial is needed to validate the effectiveness of hypnosis for symptom management after painful pediatric surgical procedures.

(570) Attitudes toward yoga in adults with chronic low back pain

M Combs and B Thorn; University of Alabama, Tuscaloosa, AL

Given the high prevalence rates of chronic low back pain in the United States and the potential beneficial effects that yoga intervention may have on this condition, the current study sought to examine the potential effects of pain catastrophizing and fear of movement on attitudes toward yoga in a population of adults (ages 19 and up) with chronic low back pain. Participants self-reporting chronic low back pain (impairing pain lasting at least 6 months) were recruited from community sites in a large collegiate town in western Alabama. Primary interest variables were assessed by the Pain Catastrophizing Scale, Tampa Scale for Kinesiophobia, and Beliefs About Yoga Scale. Hierarchical regression and traditional 4-step mediational analyses were used to test hypotheses. Results indicate that pain catastrophizing and fear of movement negatively influence attitudes toward yoga in this population. More specifically, it was found that fear of movement served as a mediator in the relationship between pain catastrophizing and attitudes toward yoga. In addition, results suggest that non-Hispanic blacks report significantly higher levels of catastrophizing and fear of movement than non-Hispanic whites. Individuals with higher levels of catastrophizing and fear of movement may be less likely to consider a treatment for their pain if it involves physical movement. Identifying cognitive barriers to consideration of a potential beneficial treatment for chronic low back pain conditions has great importance for clinical treatment of pain, especially as health care focus in the U.S. shifts to be more preventative.

(571) Fee for service complementary medicine for myofascial pain: a study exploring the utilization across medical specialties

S Griffee and C Prideaux; Mayo Clinic, Rochester, MN

Complementary Medicine in the treatment of acute myofascial pain is utilized in many tertiary hospitals. Massage therapy is a subspecialty of complementary medicine used for acute pain, with minimal side effects. Integrative medicine including massage therapy is often not covered by insurance. Due to perceived cost, physicians bias, and differing patient populations some medical specialties are often unwillingly to offer this service to patients as a fee for service option. Over a 6 month period, we examined the utilization by medical specialty of massage therapy for acute pain management in the hospital setting. Physicians in each medical specialty services were provided with an informational handout for massage therapy treatment in the treatment of myofascial pain. Also, they received email instructions on computer ordering of complementary medicine. The handout outlined the 30 minute session as well as the cost (fee for service). Over a 6 month period, the number of orders placed for massage in a tertiary hospital, specialty, provider, and pre-post pain scores were recorded. During this six month period, 522 sessions were ordered (average 87 sessions per month). Analysis revealed Cardiovascular Surgery (31%), PMR (30%), Thoracic Surgery (10%), and Pediatrics (8%) were the most frequent specialties that ordered complementary medicine. Ongoing chart analysis, will examine pain scores and patient satisfaction per medical specialty. This study is unique in that it explores the utilization of a fee for service integrative medicine by medical specialties. Specificity, Further studies looking at specialty physician bias towards integrative medicine, and strategies for implementation/cost should be considered.