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GENERAL SECTION

Original Research Article
1001 Nicole A. Hollingshead, MS, Elizabeth A. Vrany, BA, Jesse C. Stewart, PhD, and Adam T. Hirsh, PhD

Differences in Mexican Americans’ Prevalence of Chronic Pain and Co-Occurring Analgesic Medication and Substance Use Relative to Non-Hispanic White and Black Americans: Results from NHANES 1999–2004
This investigation of national survey data found that Mexican American (MA) respondents reported less chronic pain overall compared to non-Hispanic White (NHW) and Black (NHB) respondents, but MAs reported more headache and abdominal pain than NHWs. MA respondents also reported less past month analgesic medication use and co-occurring substance use relative to NHWs. These results make an important contribution to our understanding of the burgeoning MA populations, chronic pain experience and related consideration in patient care.

SPINE SECTION

Original Research Articles
1010 David Levi, MD, Scott Horn, DO, Sara Tyszko, PA, Josh Levin, MD, Charles Hecht-Leavitt, MD, and Edward Walko, DO

Intradiscal Platelet-Rich Plasma Injection for Chronic Discogenic Low Back Pain: Preliminary Results from a Prospective Trial
A prospective trial of intradiscal platelet-rich plasma (PRP) was undertaken for the treatment of discogenic low back pain. Patients were considered a categorical success if they achieved at least 50% improvement in visual analog scale (VAS) and 30% decrease in Oswestry disability index (ODI) at 1, 2, and 6 months post-treatment. Preliminary data demonstrates encouraging findings at 6 months post treatment.

1023 Zachary L. McCormick, MD, Curtis Slipman, MD, Ashot Kotcharian, MD, Akhil Chhatre, MD, Frank J. Bender III, MD, Aleya Salam, MD, Serge Menkin, MD, David J. Kennedy, MD, and Christopher Plastaras, MD

Percutaneous Lumbar Disc Decompression Using the Dekompressor: A Prospective Long-Term Outcome Study
The present study suggests that treatment of lumbosacral radicular pain due to a contained herniated disc by percutaneous lumbar disc decompression with Dekompressor results in decreased leg pain and disability, as well as reduced opioid use at 1-year follow-up. When using standard analysis, there is minimal decrement of these outcomes at 8-years post procedure, though these results must be interpreted with caution due to loss to follow up in the present study.

1031 David J. Kennedy, MD, Ryan Mattie, MD, Alan Scott Hamilton, MD, Bryan Conrad, PhD, and Matthew Smuck, MD

Detection of Intravascular Injection During Lumbar Medial Branch Blocks: A Comparison of Aspiration, Live Fluoroscopy, and Digital Subtraction Technology
Medial branch blocks may have unrecognized vascular uptake potentially resulting in false negative results. Digital subtraction angiography enhances the ability to detect inadvertent vascular flow during lumbar medial branch blocks even when it is not detected by live fluoroscopy.

continued.
Minority Aging and Endogenous Pain Facilitatory Processes

The aim of the current study was to examine the relationships among age, ethnicity, and endogenous pain facilitation using temporal summation (TS) responses to mechanical and heat stimuli. This study provides evidence suggesting that older African Americans demonstrate enhanced pain facilitatory processes, which is important because this group may be at increased risk for development of chronic pain. These results underscore the necessity of testing pain modulatory mechanisms when addressing questions related to pain perception and minority aging.

Improving Access to Chronic Pain Services Through eConsultation: A Cross-Sectional Study of the Champlain BASE eConsult Service

Excessive wait times can negatively impact individuals with chronic pain, many of whom wait months or years for care. Electronic consultation (eConsult) has been shown to be a viable model for reducing wait times and improving access to care. Our paper examines the impact of an eConsult service on improving access to care for patients experiencing chronic pain. We report a substantial reduction in wait times and high levels of satisfaction with the service.

Altered Dynamic of EEG Oscillations in Fibromyalgia Patients at Rest

The aim of the present study was to analyze EEG dynamics in fibromyalgia patients at rest. Fibromyalgia patients displayed abnormal delta and beta power from brain areas involved in pain processing during rest. Fibromyalgia patients also showed aberrant centro-parietal intra-hemispheric coherence. Resting EEG patterns can be used to characterize chronic pain states as well as to assess treatment effectiveness.

Patients Presenting to the Emergency Department with Acute Pain: The Significant Role of Pain Catastrophizing and State Anxiety

Acute pain intensity in the ED is significantly associated with pain catastrophizing and state anxiety. Pain catastrophizing influenced the relationship between anxiety and pain intensity. Evaluation of patients for cognitive/affective state during routine pain assessment would help identify any distress being experienced by the patient in relation to the reported pain condition in urgent care settings.

Cognitive-Motivational Influences on Health Behavior Change in Adults with Chronic Pain

Using a new self-report measure, the current study assessed psychological factors that influence engagement in four health behaviors in a sample of adults with chronic musculoskeletal pain. Results highlight the importance of patient beliefs to their engagement in health behaviors, and reveal a discrepancy between the amount of symptom improvement expected from the practice of the behaviors versus the amount of improvement required to actually commit to practicing them.

Can Pain or Hyperalgesia Be a Classically Conditioned Response in Humans? A Systematic Review and Meta-Analysis

Classical conditioning has been proposed to underlie the persistence of pain after tissue healing. This systematic review and meta-analysis evaluated the evidence that allodynia or hyperalgesia can be a classically conditioned response. The literature suggests that classical conditioning can be used to amplify pain, but no conclusions can be drawn about whether or not it can be used to elicit pain.

continued.
A Randomized, Double-Blind, Double-Dummy Study to Evaluate the Intranasal Human Abuse Potential and Pharmacokinetics of a Novel Extended-Release Abuse-Deterrent Formulation of Oxycodone

A well-controlled clinical study compared abuse potential of an experimental, extended-release oxycodone (DETERx) formulation with immediate-release oxycodone (OXY-IR) and placebo (PBO), administered intranasally (IN) or orally (PO). Pharmacokinetic results suggested lower abuse potential for DETERx IN than DETERx PO; both were substantially favorable to OXY-IR IN. For the subjective endpoint of Drug Liking, DETERx IN and DETERx PO scored significantly lower than OXY-IR IN. These results demonstrate DETERx IN has relatively low human abuse potential.

Salivary Alpha-Amylase Correlates with Subjective Heat Pain Perception

Self-reports of pain are important for an adequate therapy. This is a problem with patients and infants who are restricted in providing an accurate verbal estimation of their pain. Salivary alpha-amylase is suggested to be an indirect physiologic correlate of subjective heat pain perception.

Evaluating Sativex® in Neuropathic Pain Management: A Clinical and Neurophysiological Assessment in Multiple Sclerosis

Pain is a common symptom of Multiple sclerosis (MS), affecting up to 70% of patients. Pain treatment is often unsatisfactory, although emerging drugs are giving encouraging results. We demonstrated the role of Sativex® in improving pain in MS.

Pain and Functionality Following Sternotomy: A Prospective 12-Month Observational Study

This is the first Australian study evaluating pain and functionality in the 12 months following a sternotomy. At 12 months, 15.5% of participants reported on average mild pain and 0.9% moderate-severe pain on average in the preceding week at their sternotomy site, with 41.2% reporting neuropathic pain. This study highlights the need for further research to investigate whether more intensive pain management following discharge can reduce the incidence of persistent post-sternotomy pain at 12 months.

Premedication with Intravenous Ibuprofen Improves Recovery Characteristics and Stress Response in Adults Undergoing Laparoscopic Cholecystectomy: A Randomized Controlled Trial

An aberrant stress and inflammatory response to surgical injury may cause postoperative complications leading to prolonged recovery. COX inhibitors decrease the production of inflammatory mediators and may shorten post-surgical convalescence. We examined the effect of IV Ibuprofen on the quality of recovery and stress response after laparoscopic cholecystectomy. Results suggest that the administration of IV Ibuprofen improves the quality of recovery and decreases the stress response in the early postoperative period.
Local and Widespread Hyperalgesia After Isolated Tibial Shaft Fractures Treated with Intramedullary Nailing

This study suggests that localized, distal and bilateral hyperalgesia are common following an isolated tibial shaft fracture treated with intramedullary nailing, although no widespread (extrasegmental) hyperalgesia was detected.

Listening to Their Words: A Qualitative Analysis of Integrative Medicine Group Visits in an Urban Underserved Medical Setting

Integrative Medicine Group Visits (IMGV) are an 8-week outpatient medical group visit program for chronic pain patients combining mindfulness-based stress reduction (MBSR), integrative medicine, and patient education. This qualitative study used semi-structured interviews participants to better understand the effects of IMGV on patients health. Participants cite gains from IMGV including improved self-monitoring, self-regulation, and increased mindfulness.

Analgesic Efficacy and Safety of Curcuminoids in Clinical Practice: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

This meta-analysis of data from randomized controlled trials (RCTs) concludes that curcuminoids supplements may be a safe and effective strategy to improve pain severity.

Can a Smartphone Application Help Balance Patient Autonomy and Public Safety in Drivers Who Take Psychoactive Medications?

Influence of Neonatal Pain in Motor Development During Childhood

Ganglion Impar Blocks for More than Coccygodynia

Reply to the Letter by J. Hambraeus, 'Ganglion Impar Blocks for More than Coccygodynia'