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Cover: “From Butler SF, Zacharoff KL, Charity S, Black RA, Chung E, Barreveld A, Clark MS, and Jamison RN. Impact of an Electronic Pain and Opioid Risk Assessment Program: Are There Improvements in Patient Encounters and Clinic Notes?” (pp. 2047–2060)

PERSPECTIVE & COMMENTARY

Commentary
1969 Ann E. Hansen, DVM, MD and Norman J Marcus, MD

Is It Time to Consider Soft Tissue as a Pain Generator in Nonspecific Low Back Pain?

GENERAL SECTION

Original Research Article
1971 Rocío de la Vega, PhD, Mélanie Racine, PhD, Elisabet Sánchez-Rodríguez, MSc, Catarina Tomé-Pires, PhD, Elena Castaño-Lamas, PhD, Mark P. Jensen, PhD, and Jordi Miró, PhD

Pain Extent, Pain Intensity, and Sleep Quality in Adolescents and Young Adults
The aim of this study was to better understand the role that pain intensity and pain extent (number of painful areas) may play in the sleep quality of young people with acute and chronic pain. Findings suggest that both pain extent and pain intensity are important factors to examine, and may play different roles of importance depending on age of the patient or the chronicity of the pain condition.

SPINE SECTION

Original Research Article
1978 Seok Kang, MD, Seung Nam Yang, MD, PhD, Se Hwa Kim, MD, Chan Woo Byun, MD, and Joon Shik Yoon, MD, PhD

Ultrasound-Guided Cervical Nerve Root Block: Does Volume Affect the Spreading Pattern?
In present study, we aimed to investigate the injection volume effect on spreading pattern in ultrasound-guided cervical root block. We analyzed spreading pattern in 53 patients after 1 ml and 4 ml injection of contrast medium. The contrast medium showed extraforaminal spreading in all patients after 1 ml injection, and spread to intraforaminal space in 24.5% of patients after 4 ml injection. However, short-term outcome was not affected by the spreading pattern.

EDUCATION & TRAINING SECTION

Brief Research Report
1985 Anna K. Donovan, MD, MS, Gordon J. Wood, MD, MS, Doris M. Rubio, PhD, Hollis D. Day, MD, MS, and Carla L. Spagnoletti, MD, MS

Faculty Communication Knowledge, Attitudes, and Skills Around Chronic Non-Malignant Pain Improve with Online Training
Given the challenges of communicating with patients who have chronic non-malignant pain (CNMP) and the rise of prescription opioid abuse, this study employed the use of an interactive web module (COPE-REMS) for faculty development among primary care clinician-educators. After completion of the module, faculty participants had an improvement in communication knowledge, attitudes, and actual skills as measured by an Observed Structured Clinical Exam. Similar online programs would likely be beneficial to faculty at other institutions.

PAIN & AGING SECTION

Original Research Article
1993 Rollin Wright, MD, Monica Malec, MD, Joseph W. Shega, MD, Eric Rodriguez, MD, Joseph Kulas, PhD, Lisa Morrow, PhD, Juleen Rodakowski, OTD, MS, OTR/L, Todd Semla, PharmD, MS, AGSF, and Debra K. Weiner, MD

Deconstructing Chronic Low Back Pain in the Older Adult—Step by Step Evidence and Expert-Based Recommendations for Evaluation and Treatment: Part XI: Dementia
A multidisciplinary expert panel came together to create an algorithm and supportive materials to help guide primary care providers in planning treatment for older adults with dementia, an important—and often overlooked—contributor to chronic low back pain (CLBP).
2003 Amy Peacock, PhD, Suzanne Nielsen, PhD, Raimondo Bruno, PhD, Gabrielle Campbell, PhD, Briony Larance, PhD, and Louisa Degenhardt, PhD

Geographic Variation in Health Service Use and Perceived Access Barriers for Australian Adults with Chronic Non-Cancer Pain Receiving Opioid Therapy

Study of a cohort of Australian adults with chronic non-cancer pain prescribed long-term opioid therapy highlighted perceived communication, access and financial barriers to health care amongst those in outer regional/remote areas, despite similar rates of health care access by remoteness. These findings speak to the need for increased efforts to address geographic inequality in pain treatment.

2017 Milan P. Stojanovic, MD, Jennifer Fonda, PhD, Catherine Brawn Fortier, PhD, Diana M. Higgins, PhD, James L. Rudolph, MD, William P. Milberg, PhD, and Regina E. McGlinchey, PhD

Influence of Mild Traumatic Brain Injury (TBI) and Posttraumatic Stress Disorder (PTSD) on Pain Intensity Levels in OEF/OIF/OND Veterans

This study examined prospective, cohort data using state of the art diagnostic methods for TBI and PTSD, including its covariates and confounders, in order to add significant value to the body of evidence for their relationship with pain. Its results showed that comorbid PTSD and mTBI is associated with increased self-reported pain intensity while mTBI alone was not associated with increased pain.

2026 Julia R. Craner, PhD, Jeannie A. Sperry, PhD, and Michele M. Evans, APRN, CNS

The Relationship Between Pain Catastrophizing and Outcomes of a 3-Week Comprehensive Pain Rehabilitation Program

Pain catastrophizing mediates treatment gains in pain-related interference and depressed mood associated with participation in a chronic pain rehabilitation program (N = 648). These effects were significant after accounting for the influence of perceived pain severity. This study supports the position that pain catastrophizing has an instrumental role in adaptation to chronic pain, and can be modified in treatment to improve outcomes.

2036 Baraa O. Tayeb, MD, Ana E. Barreiro, MPH, Ylisabyth S. Bradshaw, DO, MS, Kenneth K. H. Chui, PhD, and Daniel B. Carr, AM, MD, DABPM, FFPMANZCA (Hon)

Durations of Opioid, Nonopioid Drug, and Behavioral Clinical Trials for Chronic Pain: Adequate or Inadequate?

We evaluated assertions in recent AHRQ and CDC publications that there is no evidence to address the efficacy and effectiveness of opioid therapy for chronic pain. We did so by assessing those trials identified in the AHRQ report as excluded due to inadequate duration, plus Cochrane systematic reviews not only for opioids, but also for pharmacologic (anticonvulsant, antidepressant, NSAID) and nonpharmacologic (behavioral) treatments for chronic pain. Nearly all trials had active treatment durations of 12 weeks or less. To dismiss chronic pain trials durations as “inadequate” if their observation period is a year or less is inconsistent with current regulatory standards. Considering only duration of active treatment in efficacy or effectiveness trials, published evidence is no stronger for any major drug category or behavioral therapy than for opioids.

2047 Stephen F. Butler, PhD, Kevin L. Zacharoff, MD, Sadaf Charity, MBA, Ryan A. Black, PhD, Emma Chung, MPH, Antje Barreved, MD, Molly S. Clark, PhD, and Robert N. Jamison, PhD

Impact of an Electronic Pain and Opioid Risk Assessment Program: Are There Improvements in Patient Encounters and Clinic Notes?

A comprehensive electronic assessment, called PainCAS®: Clinical Assessment System, was developed and implemented in three clinics to determine the impact on documentation of pain and opioid risk evaluations. The PainCAS improved documentation of chart elements in clinic notes and was associated with increased discussion of key, pain-relevant topics during the clinical visit. Electronic assessments targeted to pain treatment and designed to fit into the clinic workflow may help to standardize assessment, documentation and pain care.
**Clinical Styles and Practice Policies: Influence on Communication with Patients Regarding Worrisome Prescription Drug Monitoring Program Data**

Clinician communication with patients regarding worrisome findings in Prescription Drug Monitoring Programs (PDMPs) may influence patient responses and subsequent care. We conducted semi-structured telephone interviews with clinicians who routinely used the PDMP. Results indicated a range of approaches for communicating about PDMP results, from openly sharing, to questioning patients without disclosing access to the PDMP, to avoiding the conversation. Clinicians also reported practice policies and procedures that influenced communication with their patients.

**NEUROPATHIC PAIN SECTION**

*Original Research Article*

2082 Laiche Djouhri, PhD

**PG110, A Humanized Anti-NGF Antibody, Reverses Established Pain Hypersensitivity in Persistent Inflammatory Pain, but not Peripheral Neuropathic Pain, Rat Models**

Effects of a humanised anti-NGF antibody was investigated in rat models of chronic inflammatory and peripheral neuropathic pain (PNP). PG110 reversed established heat and mechanical hypersensitivity in the inflammatory pain model but not in the spinal nerve injury model of PNP. The results suggest that NGF may play a greater role in inflammatory pain than PNP. Therapies that target NGF might be effective for treatment of chronic inflammatory pain, but probably not PNP.

**MUSCULOSKELETAL SECTION**

*Original Research Article*

2100 Charles E. Argoff, MD, Birol Emir, PhD, Ed Whalen, PhD, Marie Ortiz, Lynne Pauer, MS, and Andrew Clair, PhD

**Pregabalin Improves Pain Scores in Patients with Fibromyalgia Irrespective of Comorbid Osteoarthritis**

Data on how FM patients with comorbid OA respond to recommended therapies (such as pregabalin) could help their treatment. In this pooled analysis of pregabalin clinical trial data, FM patients with or without comorbid OA responded to treatment with pregabalin 450mg/day with significant improvements in pain intensity scores. These data could provide guidance to healthcare professionals treating these patients.
ACUTE & PERIOPERATIVE PAIN SECTION

Original Research Article

2109 Hala Saad Abdel-Ghaffar, MD, Sahar Abdel-Baky Mohamed, MD, and Khaled Mohamed Fares, MD

Combined Intrathecal Morphine and Dexmedetomidine for Postoperative Analgesia in Patients Undergoing Major Abdominal Cancer Surgery

Animal studies demonstrated a synergistic interaction between opioid and alpha 2 adrenergic anti-nociception in rat spinal cord. Human studies on analgesic effects of combined intrathecal morphine and dexmedetomidine in postoperative pain are still lacking. This study shows that the addition of Dexmedetomidine to 0.5mg ITM did not enhance postoperative analgesia. The addition of dexmedetomidine to lower doses of ITM or to other opioids of shorter duration could prove clinically significant and further studies are needed.

CANCER PAIN & PALLIATIVE CARE SECTION

Original Research Article

2119 Nicholas MacLeod, MBChB, Caroline Kelly, MSc, Jon Stobo, MSc, Lynn McMahon, BSc, Diann Taggart, BSc, Marie Fallon, MD, and Barry J. Laird, MD

Pain in Malignant Pleural Mesothelioma: A Prospective Characterization Study

Pain due to mesothelioma is often difficult to control and often requires multiple analgesics. An understanding of this and its underlying neurobiology may guide clinicians in the appropriate treatments. This study characterises mesothelioma related pain which is often severe and interferes with function. Pain which has a neuropathic component is only present in half of patients, but is more intense. No features were predictive of response to radiotherapy. A detailed pain assessment in mesothelioma is necessary to guide analgesic treatment.

HEADACHE & FACIAL PAIN SECTION

Original Research Article

2127 María Palacios-Cen˜a, PT, MSc, Lidiane Lima Florencio, PT, Gabriela Natália Ferracini, PT, Johanna Barón, MD, Ángel L. Guerrero, MD, PhD, Carlos Ordás-Bandera, MD, Lars Arendt-Nielsen, PhD, DMSc, and César Fernández-de-las-Peñas, PT, PhD, DMSc

Women with Chronic and Episodic Migraine Exhibit Similar Widespread Pressure Pain Sensitivity

This study demonstrated that women with migraine exhibited widespread pressure pain hypersensitivity as a clinical manifestation of central pain mechanisms. Widespread pressure pain hypersensitivity was similar between episodic and chronic migraine. The intensity, but not the frequency, of migraine attacks was associated with pressure pain hyperalgesia.

REHABILITATION SECTION

Brief Research Report

2134 Laura E. Bourn, PhD, Minden B. Sexton, PhD, Katherine E. Porter, PhD, and Sheila A.M. Rauch, PhD

Physical Activity Moderates the Association Between Pain and PTSD in Treatment-Seeking Veterans

Posttraumatic stress disorder (PTSD) and pain are frequently comorbid conditions that can result in bidirectional exacerbations. Initial research suggests physical activity may prevent PTSD symptoms or assist with recovery. Multiple moderated linear regressions were used to examine the influence of physical activity on the relationship between pain and PTSD symptoms in a sample of Veterans.

BOOK/WEB REVIEW SECTION

Book Review

2142 Peter R. Wilson, MBBS, PhD

Pain in Women: Current Concepts in the Understanding and Management of Common Painful Conditions in Females

LETTERS TO EDITOR

2145 Nivan Zoheiry, MD, MSc, PhD, Maha Alkokani, MD, J.B.PM&R, Richard Ward, MSc, MRCP, FRCPath, and Angela Mailis, MD, MSc, FRCPC

Characterization of Chronic Pain and Opioid Usage in Adult Sickle Cell Disease Patients Referred to a Comprehensive Pain Clinic

2146 Ankush Bansal, MD, Sumit Singh, MD, Sepehr Rejai, MD, Siamak Rahman, MD, and Sungkook Andrew Park, MD

Intraarticular Morphine Overdose: The Role of the Perioperative Physician

2148 Kamal Mezian, M.D

A New Sacroiliac Joint Injection Technique and Its Short-Term Effect on Chronic Sacroiliac Region Pain

2149 Cesar R. Carcamo MD, MPH

Lumbar Rib Causing Chronic Pain After Minor Thoracic Injury