Cover: “From Carcamo CR. Dysfunctional Relationship Between the Prefrontal Cortex and Amygdala for Explaining Posttraumatic CRPS Syndrome.” (pp. 1379–1381)

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Massage Therapy for Pain—Call to Action

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GENERAL SECTION
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1220 Marie-Pierre Cyr, PT, Daniel Bourbonnais, OT, PhD, Alexandra Pinard, PT, Olivia Dubois, PT, and Mélanie Morin, PT, PhD
Reliability and Convergent Validity of the Algometer for Vestibular Pain Assessment in Women with Provoked Vestibulodynia
Vulvodynia is a neglected health issue with a prevalence approaching common chronic pain conditions such as low back pain and arthritis. Overcoming the limitations of the current vestibular pain assessment tools, the algometer has proven to be a reliable and valid instrument that provides a faster and more accurate reading of the pressure applied to measure pain threshold and pain tolerance in the vestibular area.

1229 Sven Weum, MD, PhD and Louis de Weerd, MD, PhD
Perforator-Guided Drug Injection in the Treatment of Abdominal Wall Pain
As an alternative to surgery, abdominal cutaneous nerve entrapment syndrome (ACNES) may be treated with drug injection at the point of nerve entrapment. Although ultrasound does not visualize the nerve directly, color Doppler visualizes the perforating vessels accompanying the nerve. This technique permits precise and safe drug administration in proximity to the location where nerve entrapment is anticipated to occur at the exit point through the anterior muscle fascia.

SPINE SECTION
Original Research Articles
1233 Koen Van Boxem, MD, PhD, FIPP, Nelleke de Meij, MSc, Jacob Patijn, MD, PhD, Jan Wilmink, MD, PhD, Maarten van Kleef, MD, PhD, FIPP, Jan Van Zundert, MD, PhD, FIPP, and Alfons Kessels, MD, MSc
Predictive Factors for Successful Outcome of Pulsed Radiofrequency Treatment in Patients with Intractable Lumbosacral Radicular Pain
We assessed the predictors of PRF in patients with chronic intractable lumbosacral radicular pain. A positive diagnostic nerve root block and age ≥ 55 were predictive factors for successful outcome at 6 months while disability was a negative predictor. The use of Failed back surgery syndrome, gender, duration of pain, Numerical Rating Scale, level and side of treatment, DN4 and RAND-36 as predictor for success was not supported.
Is There a Relationship Between Body Mass Index and Fluoroscopy Time During Sacroiliac Joint Injection? A Multicenter Cohort Study

Few studies have analyzed the relationship between BMI, fluoroscopy time and radiation exposure during interventional spine injections for pain management, and only one small, underpowered study of these factors related to SIJ injections has been published. In this multicenter cohort study, we aimed to determine the relationship between BMI and fluoroscopy time during SIJ injections performed for a pain indication. The data (n=459) indicated that fluoroscopy time during sacroiliac joint injections is not increased in patients who are overweight or obese, regardless of whether a first-time sacroiliac joint injection was performed, bilateral injections were performed, a trainee was involved, or a new trainee was involved. We also place these findings in the context of the radiation safety literature for both patients and practitioners.

PAIN & AGING SECTION

Original Research Article

1249 Monica Rho, MD, Alejandra Camacho-Soto, MD, Abby Cheng, MD, Mark Havran, DPT, LAT, CSCS, Natalia E. Morone, MD, MS, Eric Rodriguez, MD, Joseph Shega, MD, 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 VIII: Lateral Hip and Thigh Pain

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 Lateral Hip and Thigh Pain, an important-and often overlooked-contributor to chronic low back pain (CLBP).

PRIMARY CARE & HEALTH SERVICES SECTION

Original Research Article

1261 Erin E. Krebs, MD, MPH, Kurt Kroenke, MD, Jingwei Wu, PhD, Matthew J. Bair, MD, MS, Mary Ann Kozak, DrPH, and Zhangsheng Yu, PhD

Opioid Use as a Predictor of Health Care Use and Pain Outcomes: Analysis of Clinical Trial Data

We examined effects of pre-enrollment opioid use on outcomes of a 12-month collaborative pain care management trial. Patients receiving opioid analgesics prior to trial enrollment had higher pain severity and health-related disability at baseline and used more health care services and analgesics during the trial; however, we found that response to the trial intervention response was not significantly modified by pre-existing opioid therapy.

PSYCHOLOGY, PSYCHIATRY, IMAGING & BRAIN NEUROSCIENCE SECTION

Original Research Article

1269 Raymond C. Tait, PhD, John T. Chibnall, PhD, Kylie House, BA, and Joann Biehl, BS

Medical Judgments Across the Range of Reported Pain Severity: Clinician and Lay Perspectives

Lay and medical student clinical judgments regarding causes, treatment, and consequences of chronic pain diverge as reported pain increases to high levels of severity. While both groups discount high pain severity, the pattern of increasing divergence suggests that different mechanisms may account for symptom discounting in the two groups, with potentially negative implications for the treatment of severe pain conditions.

OPIOIDS, SUBSTANCE ABUSE & ADDICTIONS SECTION

Original Research Article

1282 Hilary J. Mosher, MFA, MD, Kelly K. Richardson, PhD, and Brian C. Lund, PharmD

The 1-Year Treatment Course of New Opioid Recipients in Veterans Health Administration

Short- and long-term opioid therapies are clinically distinct. Using a novel cabinet supply approach, we describe short vs. long-term patterns of opioid prescription in the year following initial receipt. The proportion of all incident recipients who met the definition for long-term therapy within a year decreased from 20.4% (N=76,280) in 2004 to 18.3% (N=96,166) in 2011. Long-term opioid receipt patterns established within the first months following initial use persist for the majority of patients.
METHODOLOGY, MECHANISMS & TRANSLATIONAL RESEARCH SECTION

Original Research Article

1292 Hadas Nahman-Averbuch, PhD, Lior Dayan, MD, MSc, Elliot Sprecher, PhD, Uri Hochberg, MD, Silviu Brill, MD, David Yarnitsky, MD, and Giris Jacob, MD, DSc

Pain Modulation and Autonomic Function: The Effect of Clonidine
Noradrenaline tone, although it did not change pain perception or pain modulation, affects the relationships between pain modulation and autonomic function such that after clonidine, higher offset analgesia capabilities were associated with lower heart rate.

NEUROMODULATION & INTERVENTIONAL SECTION

Case Report

1302 Salim M. Hayek, Jennifer A. Sweet, Jonathan P. Miller, and Rony R. Sayegh

Successful Management of Corneal Neuropathic Pain with Intrathecal Targeted Drug Delivery
This report describes the first case of corneal neuropathic pain successfully treated with targeted intrathecal drug delivery. This was accomplished by advancing the intrathecal catheter to the C1/C2 level and using a combination of bupivacaine and low dose fentanyl along with allowing frequent patient-activated boluses. The patient continues to experience significant pain relief after more than one year following intrathecal pump implant.

NEUROPATHIC PAIN SECTION

Original Research Article

1308 Katie E. de Luca, MChiro, Lynne Parkinson, PhD, Julie E. Byles, PhD, T.K.T. Lo, PhD, Henry P. Pollard, PhD, and Fiona M. Blyth, PhD

The Prevalence and Cross-Sectional Associations of Neuropathic-like Pain Among Older, Community-Dwelling Women with Arthritis
This article used the painDETECT to screen for neuropathic-like pain in a community-based sample of older women with arthritis. Neuropathic-like pain was found to be common, and women were more likely to have poorer health related quality of life and greater disability.

ACUTE & PERIOPERATIVE PAIN SECTION

Original Research Article

1317 Joachim Erlenwein, MD, Kai-Martin Thoms, MD, Felix Brandebusemeyer, Michael Pfingsten, PhD, Ashham Mansur, MD, Michael Quintel, MD, Michael Peter Schön, MD, and Frank Petzke, MD

Pre-Existing Chronic Pain Influences the Severity of Acute Herpes Zoster Pain – A Prospective Observational Cohort Study
Recent studies describe chronic pain as a relevant risk factor for severe postoperative pain. The current study on 60 patients with severe herpes zoster infection demonstrated that a history of chronic pain in addition to acute herpes zoster pain was also associated with severe intensity of zoster pain. Furthermore, patients with pre-existing chronic pain had more acute-pain-related dysfunction and needed longer hospitalisation. These findings support the relevance of chronic pain as a comorbid condition.

CANCER PAIN & PALLIATIVE CARE SECTION

Original Research Article

1329 Ahmed H. Othman, MD, Mohamad Farouk Mohamad, MD, and Heba Abdel-Razik Sayed, MD

Transdermal Fentanyl for Cancer Pain Management in Opioid-Naive Pediatric Cancer Patients
We conducted our study on a special population, pediatric patients with cancer. The management of pain in this population is challenging and requires rapid intervention so that pain management does not affect their compliance during the course of cancer treatment. Our study revealed that we can use TTS-fentanyl safely and with high efficacy in the management of chronic, moderate to severe, pediatric cancer pain even without prior opioid administration.
HEADACHE & FACIAL PAIN SECTION

*Original Research Article*

1337 Steven R. Hanling, MD, Joseph E Lagrew II, MD, Derrick H. Colmenar, MD, Albin S. Quiko, MD, and Carol A. Drastol, RN

**Intravenous Cosyntropin Versus Epidural Blood Patch for Treatment of Postdural Puncture Headache**

This study evaluated the efficacy of IV cosyntropin as an alternative to epidural blood patch (EBP) for refractory or severe PDPH. Cosyntropin demonstrated similar efficacy to EBP immediately after treatment and days 3 and 7 post treatment (respectively, $p = 0.459$, $p = 0.391$ and 0.925 for pain and $p = 0.189$ and 0.478 for function). Treatment effects remained at day 1 after multivariate analysis ($p < 0.001$ and $p = 0.002$ for pain and function, respectively). It is reasonable to consider IV cosyntropin as the treatment of choice for patients in whom EBP is contraindicated or in austere environments where there is limited or no access to anesthesia trained providers.

REHABILITATION SECTION

*Original Research Article*

1343 Emma Burns, BBiomedSci, Lucinda Sian Chipchase, PhD, and Siobhan May Schabrun, PhD

**Reduced Short- and Long-Latency Afferent Inhibition Following Acute Muscle Pain: A Potential Role in the Recovery of Motor Output**

Short- and long-latency afferent inhibition, mechanisms thought to reflect the integration of sensory information with motor output at the cortex, are reduced following acute muscle pain. A reduction in these mechanisms may contribute to the restoration of normal motor output after an episode of acute muscle pain.

INTEGRATIVE MEDICINE SECTION

*Review Article*

1353 Cindy Crawford, BA, Courtney Boyd, MA, Charmagne F. Paat, BS, Ashley Price, BS, Lea Xenakis, MPA, EunMee Yang, MA, Weimin Zhang, PhD, and the Evidence for Massage Therapy (EMT) Working Group

**The Impact of Massage Therapy on Function in Pain Populations—A Systematic Review and Meta-Analysis of Randomized Controlled Trials: Part I, Patients Experiencing Pain in the General Population**

A systematic review and meta-analysis was conducted, using Samueli Institute's rapid evidence assessment (REAL(c)) methodology, to rigorously assess the quality of massage therapy and the evidence for its efficacy in treating individuals who would typically visit their general health practitioner with complaints of pain that is affecting function-related and other daily life outcomes. This review also addresses massage therapy safety, research challenges, how to address identified research gaps, and necessary next steps for implementing massage therapy as a viable pain management option for general pain populations.

BOOK/WEB REVIEW SECTION

*Book Review*

1376 Peter R. Wilson, MD, PhD

**Sridhar Vasudevan, MD: Multidisciplinary Management of Chronic Pain. A Practical Guide for Clinicians**

LETTERS TO THE EDITOR

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**Dysfunctional Relationship Between the Prefrontal Cortex and Amygdala for Explaining Posttraumatic CRPS Syndrome**

1382 Elisa Grana, MD, Marco Invernizzi, MD, PhD, Alessio Baricich, MD, Giovanni Sguazzini Viscontini, MD, and Carlo Cisari, MD

**A Rare Cause of Back Pain During Pregnancy and Lactation: Management and Treatment**

1385 Yakov Perper, MD

**Contrast Spread Technique: Evolution**

1386 Daehyun Jo, MD, PhD, Philip M. Finch, MD, FFPMANZCA, and Jinyoung Oh, MD

**Epiduroscopic Laser Neural Decompression for Removal of L2–3 Disc Herniation in a Patient with Symptoms Suggestive of L5 Nerve Root Involvement**